CORPORATE IMAGE DEVELOPMENT, ADVERTISING, PROMOTION, AND DISTRIBUTION CHANNELS

INPUT

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INPUT
Planning Services For Management

CORPORATE IMAGE DEVELOPMENT, ADVERTISING, PROMOTION, AND DISTRIBUTION CHANNELS FOR OKI OFFICE TELECOMMUNICATIONS PRODUCTS

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CORPORATE IMAGE DEVELOPMENT, ADVERTISING, PROMOTION, AND DISTRIBUTION CHANNELS FOR OKI OFFICE TELECOMMUNICATIONS PRODUCTS

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EXHIBITS

I INTRODUCTION

I INTRODUCTION

A. OBJECTIVE

- This study is the result of a contract signed September 21, 1984 by Masahiko Suzuki of Oki, a copy of which comprises Appendix G. It focuses on the advertising/promotion and marketing strategies necessary for the success of Oki office and telecommunications products in the United States.

- The product categories specifically addressed by the study are:

  - PBXs.

  - Modems.

  - Personal computers.

  - Printers.

  - Floppy disk drives.

B. METHODOLOGY

- The principal source of data was a series of interviews with computer retailers, distributors, system integrators, product manufacturers, advertising agencies, magazines, trade show promoters, and broadcasting companies as follows:

  - Twelve interviews with system integrators.
  - Three with mail order retailers.
  - Seven with retailers.
  - Five with hardware distributors.
  - Ten with advertising agencies.
  - Six with magazines.
  - One with a broadcaster.
  - Three with trade show promoters.
  - Twenty-two with equipment manufacturers.

- The majority of interviews were carried out by telephone, with the exception of nine which were carried out in person in the Bay Area.

- The interviews are included in the support documentation. Three interviewees desired anonymity, and their names and companies are not revealed.

- Also included in the support documentation are a number of "media kits" supplied by magazines and advertising agencies.

- Another source of information was INPUT's extensive library of INPUT reports, company literature, and industry articles.

II EXECUTIVE SUMMARY

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- This executive summary is designed in a presentation format in order to:

  - Help the busy reader quickly review key research findings.

  - Provide a ready-to-go executive presentation, complete with script, to facilitate group communication.

- The key points of the entire report are summarized in Exhibits II-1 through II-5. On the left-hand page facing each exhibit is a script explaining the exhibit's contents.

A. PBXs: RBOCs CREATE NEW OPPORTUNITIES

- The PBX market is expected to have a modest 2.8% annual growth rate through 1988, to \$3.4 billion. However, this low growth rate is deceiving; very substantial opportunities do exist.

- The breakup of AT&T has opened up a whole new distribution channel for non-AT&T manufacturers: the regional bell operating companies (RBOCs).

- INPUT recommends that Oki adopt an OEM strategy in the PBX marketplace, distributing through RBOCs and taking advantage of this new distribution channel.

- The RBOCs are actively recruiting non-AT&T suppliers; several independent manufacturers are already supplying RBOCs. Since the breakup of AT&T was recent, INPUT expects this window will be open for the next one to two years.

- INPUT recommends that Oki research and study the needs of the RBOCs. There are many product opportunities to exploit beyond PBXs.

- The RBOCs can offer very quick and effective distribution. They are well-financed and staffed with experienced professionals.

- Very little end-user advertising and promotion will be needed to support distribution through RBOCs; the RBOCs will take on this responsibility. Of primary importance is signing on RBOCs, which can be accomplished more efficiently through individual contacts—direct sales calls or trade shows—than through advertising. However, pure corporate image development requires advertising.

EXHIBIT II-1

PBXs: RBOCs CREATE NEW OPPORTUNITIES

- **PBX Market Is Growing Less Than 3%**
- **But New Distribution Channel, RBOCs, Creates New Opportunities**
- **Oki Should Distribute through RBOCs**
- **New Product Opportunities are Also Available through RBOCs**
- **Image Development Can Be Enhanced through Trade Show Attendance and Direct Sales**

B. MODEMS: GROWTH IN DEMAND BUT THREAT OF BUNDLING

- The demand for modems is rising very rapidly. This demand is fueled by the following factors:

  - Professionals are increasing their use of microcomputers.

  - Prices of lower-speed modems and of modems in general are declining.

  - A greater variety of computer information services is becoming available.

- Ultimately, this increased demand may be met entirely by computer manufacturers bundling modems into their products, closing out the opportunities for independents. This is one risk in the modem market.

- INPUT recommends that Oki avoid this marketplace; it is too fragile to merit committing resources to it.

- If Oki decides it does want to enter this market, there are two recommendations. One is to adopt a commodity strategy by relying on current distribution channels in printers to gain the attention of retailers. The second is to provide product differentiation through unique software (for example, Cygnet) but at a lower price.

- Unless a truly superior product like Hayes can be offered, extensive end-user advertising would be unproductive. Advertising in dealer-oriented magazines and participating in trade shows, however, would be very important aids to success with this strategy because they would build awareness in the distribution network.

EXHIBIT II-2

MODEMS: GROWTH IN DEMAND BUT THREAT IN BUNDLING

- **Demand for Modems Is Rising**
- **Manufacturers Will Bundle Modems**
- **The Market Is Large but Fragile**
- **Alternatives Include:**
  - **Commodity Strategy**
  - **Product Differentiation**
- **Advertising Is Required to Build Awareness**

C. PERSONAL COMPUTERS: SUCCESS DEPENDS ON PRODUCT DIFFERENTIATION

- INPUT recommends that Oki take advantage of its technological leadership by following a product differentiation strategy in the personal computer marketplace. In particular, a personal computer or workstation tailored to the specific needs of a particular industry should be developed and sold to a vertical market through independent sales organizations or value-added remarketers.

- Corporate image and advertising needs will be modest. If the product truly serves a currently unsatisfied niche, trade show and trade publication advertising targeted directly to decision makers in the vertical markets served will be adequate to ensure success.

- The leading computer manufacturers are spending large amounts of money on R&D, promotion, distribution, etc.

    - Apple says it is spending $100 million this year on advertising and promotion.

    - IBM is spending $40 million on its PCjr alone.

- For a new microcomputer entry, the only feasible approach is identifying niches and vertical markets.

- The highly targeted approach also has real value for Oki. This approach includes bundling other Oki products into the PC system. For example, one market might be small businesses requiring a PC/PBX system that includes software for telephone accounting. INPUT believes there are a number of synergistic ideas like this that should be examined.

EXHIBIT II-3

PERSONAL COMPUTERS: SUCCESS DEPENDS ON PRODUCT DIFFERENTIATION

- **Oki Should Tailor PC Offerings to Vertical Markets**
- **Advertising Should Be Limited to Trade Shows and Trade Publications**
- **Advertising by Leaders Shouldn't Be Challenged**
  - **Apple Is Spending $100 Million**
  - **The IBM PCjr Campaign is $40 Million**
- **Product Marriages Can Hold the Key to Product Differentiation**

D. PRINTERS: QUALITY COMMANDS PREMIUMS

- Oki has led the way in this market with its "Cadillac" image and is continuing this current strategy, with even more emphasis on capitalizing on the good reputation. Advertising in computer specialty magazines and offering products for magazine product review are methods to consider in this area.

- Prices are dropping substantially in the printer market due to competition, especially in the lower-end small business and home user markets. Keeping the price up requires maintaining the quality image and giving careful attention to the distribution channel to minimize the effect of discounters.

- Adherence to a high-end strategy emphasizing quality, features, and technological breakthroughs is the best route to maintaining the premium margins that Oki already earns in this market.

- The number of printer vendors should decline as existing vendors expand their lines and as dealers seek to reduce their sources. (Dealers prefer a single source.) Both of these trends work to Oki's advantage. Advertising in one or two dealer/distributor-related magazines is recommended to maintain awareness of Oki's quality image. Quality is the key, since the last thing the dealer wants to do is to handle returns and service problems.

- Small distributors will be squeezed out of printer distribution, because they cannot provide the support dealers demand and they are facing serious pricing pressures.

EXHIBIT II-4

PRINTERS: QUALITY COMMANDS PREMIUMS

- **Oki Should Maintain Cadillac Image**
- **More Advertising in Computer Specialty Magazines Is Recommended**
- **Prices on Low-End Products Are Dropping**
- **High-End Prices Are More Profitable**
- **Number of Vendors Is Declining**
- **Small Distributors Are Facing Squeeze**

E. FLOPPY DISK DRIVES: AN OEM SALE

- INPUT recommends that Oki use a product differentiation strategy in the floppy disk drive marketplace, offering vertical recording 3.5-inch microfloppy drives.

- Less than one million microfloppy drives will be sold in 1984, but over three million will be sold in 1986. This represents extremely fast growth.

- Floppy disk drives are sold overwhelmingly by independent manufacturers to OEMs; Oki should follow the same pattern.

- An OEM sales policy requires very little corporate image development or promotion. Most important, simply, is individual contact. Of course, attendance at the major trade shows--NCC and Comdex--are very important means for establishing these contacts.

- The main concern in this marketplace for Oki is the disconcerting dependence on OEMs, which can turn to in-house manufacturing or quickly change suppliers; competitive exposure is high.

- Oki may also want to consider an organizational approach that establishes a direct sales force to sell to OEMs, turnkey systems companies, and other resellers. It is feasible that all Oki products reviewed in this study could be packaged in a way that would be attractive to this "reseller" distribution channel.

EXHIBIT II-5

FLOPPY DISK DRIVES: AN OEM SALE

- Oki Should Offer 3.5-Inch Vertical Recording Drives

- Oki Should Sell to OEMs

- There Is Little Need for Advertising

- The Market Is Dependent on OEMs

III TRENDS IN DISTRIBUTION CHANNELS FOR OFFICE AND TELECOMMUNICATIONS PRODUCTS

III TRENDS IN DISTRIBUTION CHANNELS FOR OFFICE AND TELECOMMUNICATIONS PRODUCTS

A. TRENDS BY PRODUCT TYPE

1. PBXs

- The breakup of AT&T has opened up an extremely important new distribution channel to PBX manufacturers--the regional bell operating companies (RBOCs). These firms have substantial financial and personnel resources and are eager to decrease their reliance on AT&T by going outside the old AT&T family to find new suppliers.

- Northern Telecom and InteCom are among the PBX manufacturers who have announced their intentions to shift from inside sales forces and interconnects to RBOCs as primary distribution outlets.

- Even AT&T has announced its willingness to look to outside suppliers for products it cannot make effectively in-house.

- Interconnection companies have previously been enormously successful in distributing PBXs, but they will lose share to the RBOCs and AT&T as PBX manufacturers shift their resources toward servicing these new outlets.

2. MODEMS

- OEMs and system integrators will grow more important to modem manufacturers as they bundle more modems into their offerings and as their share of the overall market for computer systems increases.

- Computer manufacturers are increasing their vertical integration and are expected to add modems to their product lines. In addition, they will begin bundling modems into their computers, precluding the need for add-on purchases--and reducing the marketplace for independents.

- Direct sales to corporations and catalog sales of standalone modems will increase.

3. PERSONAL COMPUTERS

- The retail channel will continue to be the principal distribution channel.

- Value-added remarketers will pick up a substantial share of the personal computer (PC) market as applications grow more specialized. This should benefit Oki since many of these resellers prefer to deal with as few suppliers as possible. They will also take the lowest risk choice in selecting hardware for their systems.

- Another channel with an increasing share will be direct sales to corporations. This channel will benefit from corporations' increasing propensity to centralize their PC purchasing.

4. PRINTERS

- Dealers are pruning the number of printer lines they carry in order to reduce sources; they would prefer to have only one printer vendor in order to simplify technical support.

- Distributors are often undercapitalized and have problems employing enough qualified sales and service people to support dealers.

- The success of large retail chains (which buy direct from manufacturers), the increase in direct sales to corporations, and manufacturers' move to sell directly to dealers are three factors causing the squeeze on distributors. The numerous small distributors evident today will be forced to consolidate into larger, stronger distributors. Many will fail.

- Distributors are extremely concerned with the maintainability of gross margins; as can be seen in Exhibit III-2, it is their single most important consideration in deciding what products to stock. They are also keen on product availability, end-user demand, and manufacturer technical support for end users.

- Distributors report that they make their highest margins on fixed disk drives, as shown in Exhibit III-3. Their lowest margins are on floppy disk drives.

2. NATIONAL ACCOUNT DISTRIBUTORS

- These firms sell small systems directly to large companies. There are not many national account distributors, but the David Jamison Carlyle Corporation is a prime example.

- These firms have established relationships with large corporation data processing and purchasing management, and they are ideal outlets for manufacturers with small sales forces.

3. OEMs, PRIVATE LABEL ACCOUNTS, AND SYSTEM INTEGRATORS

- These organizations range from very small to very large. There are over 3,000 firms active in this category in the U.S. Large mainframe computer

EXHIBIT III-1

U.S. OFFICE PERSONAL COMPUTER HARDWARE DISTRIBUTION CHANNELS REVENUE FORECAST

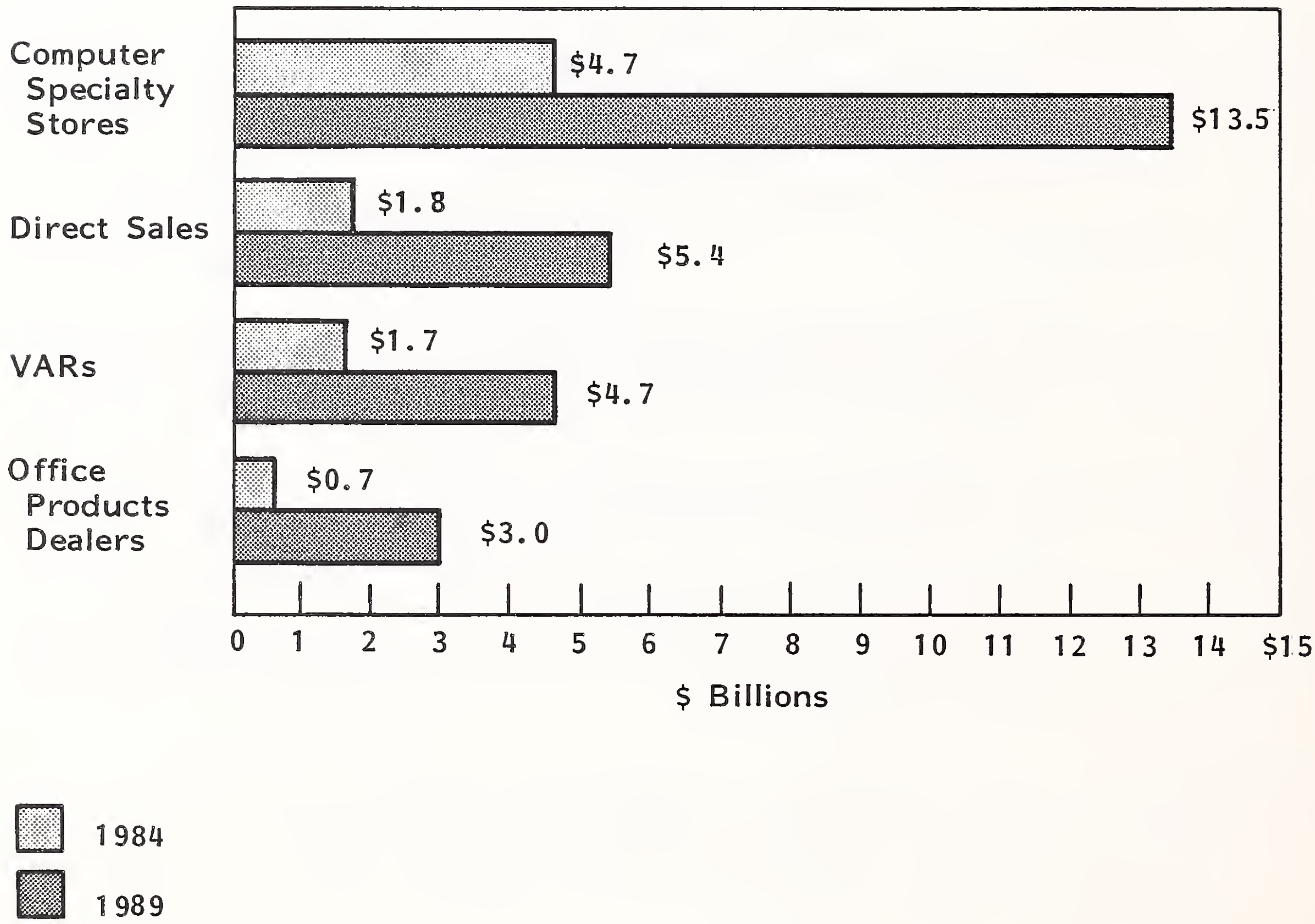


EXHIBIT III-3

DISTRIBUTOR MARGINS

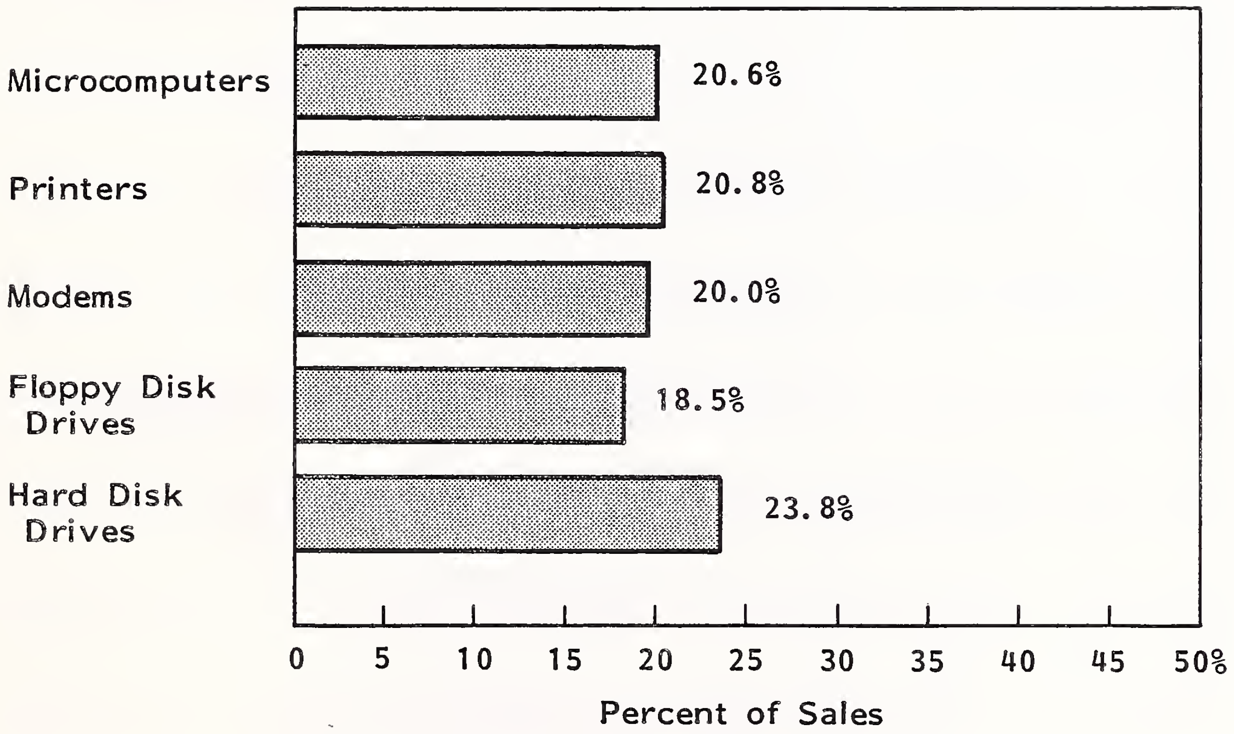


EXHIBIT III-2

DISTRIBUTOR STOCKING FACTORS

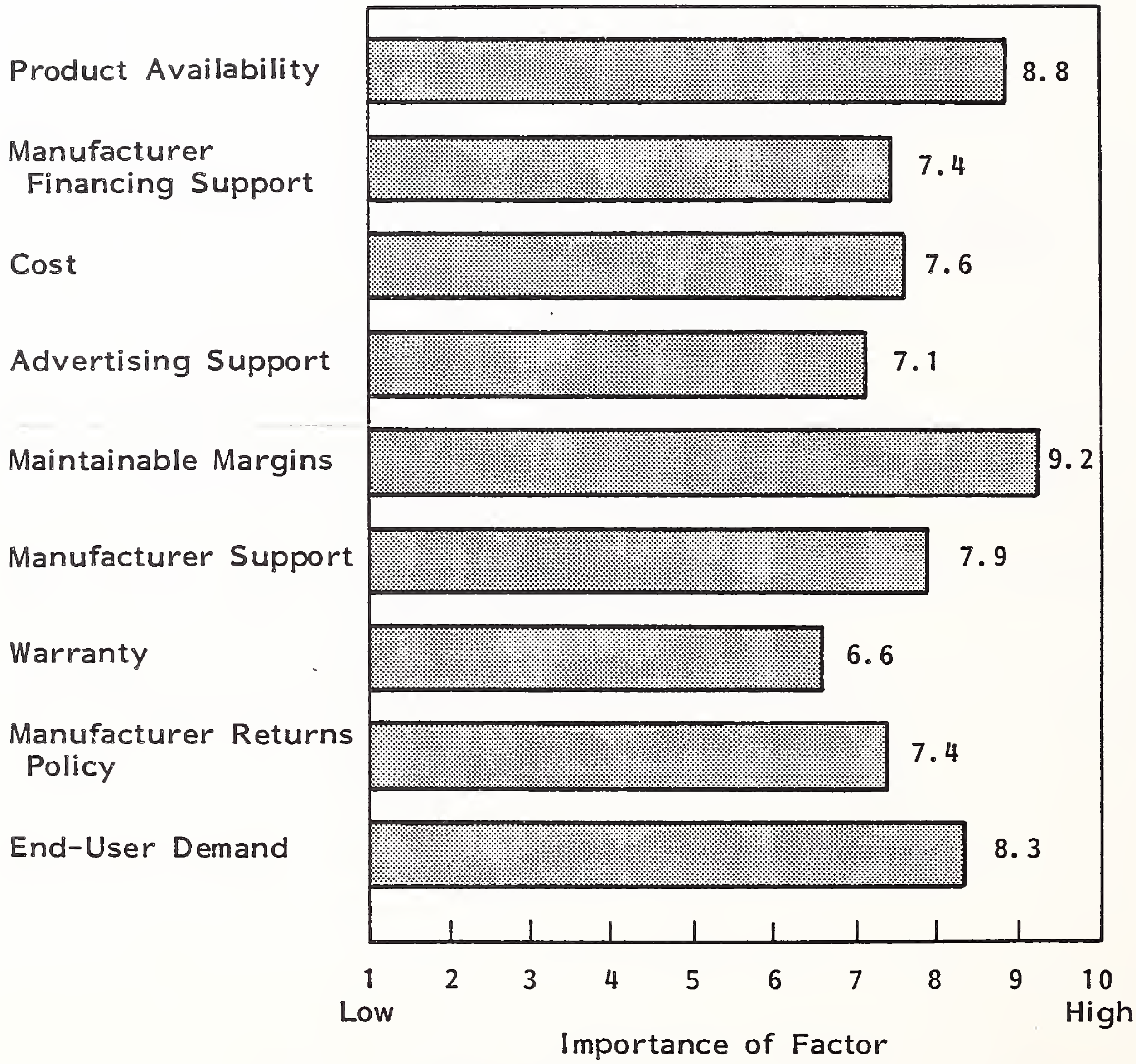
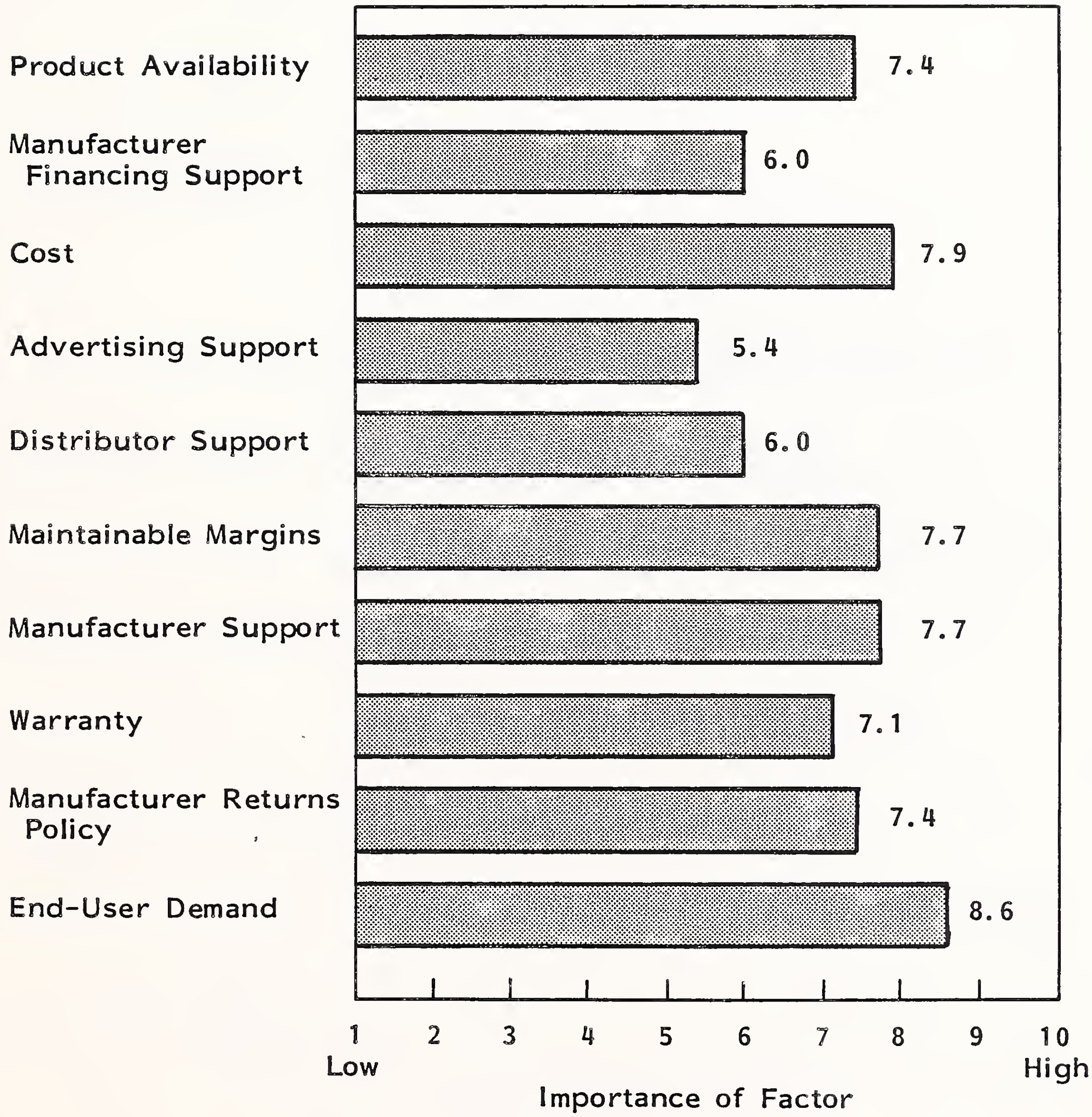


EXHIBIT III-4

SYSTEM INTEGRATOR STOCKING FACTORS



manufacturers such as Burroughs and Honeywell do a lot of private labeling. System integrators--often called value-added remarketers in the industry (and in this report)--are another type of company in this group. INPUT recommends that Oki study this distribution alternative for its strategic potential.

- As systems become more standardized, businesses outside the traditional computer industry will enter the business of selling specialized office systems; the value-added remarketer (system integrator) channel is very promising.

- The single most important element in system integrators' decisions about which lines to carry is end-user demand, as shown in Exhibit III-4. Cost is also very important, as well as maintainable margins and manufacturer technical support.

4. RETAIL COMPUTER STORES

- Computer stores have located one strong niche: sales and servicing of personal computers to individuals and, to a lesser extent to small businesses.

- These stores are losing share to other outlets, however, as corporations centralize their purchasing operations, going directly to manufacturers for PCs, and as system integrators increase their share.

- Retail stores believe that the ability to maintain high margins is the single most important consideration in stocking products, as can be seen in Exhibit III-5. Manufacturer support, end-user demand, and product availability are also extremely important.

- Mail order firms--in the same general class as computer stores--also rate maintainable margins high but believe end-user demand to be even more important. Exhibit III-6 presents this data.

EXHIBIT III-6

MAIL ORDER STOCKING FACTORS

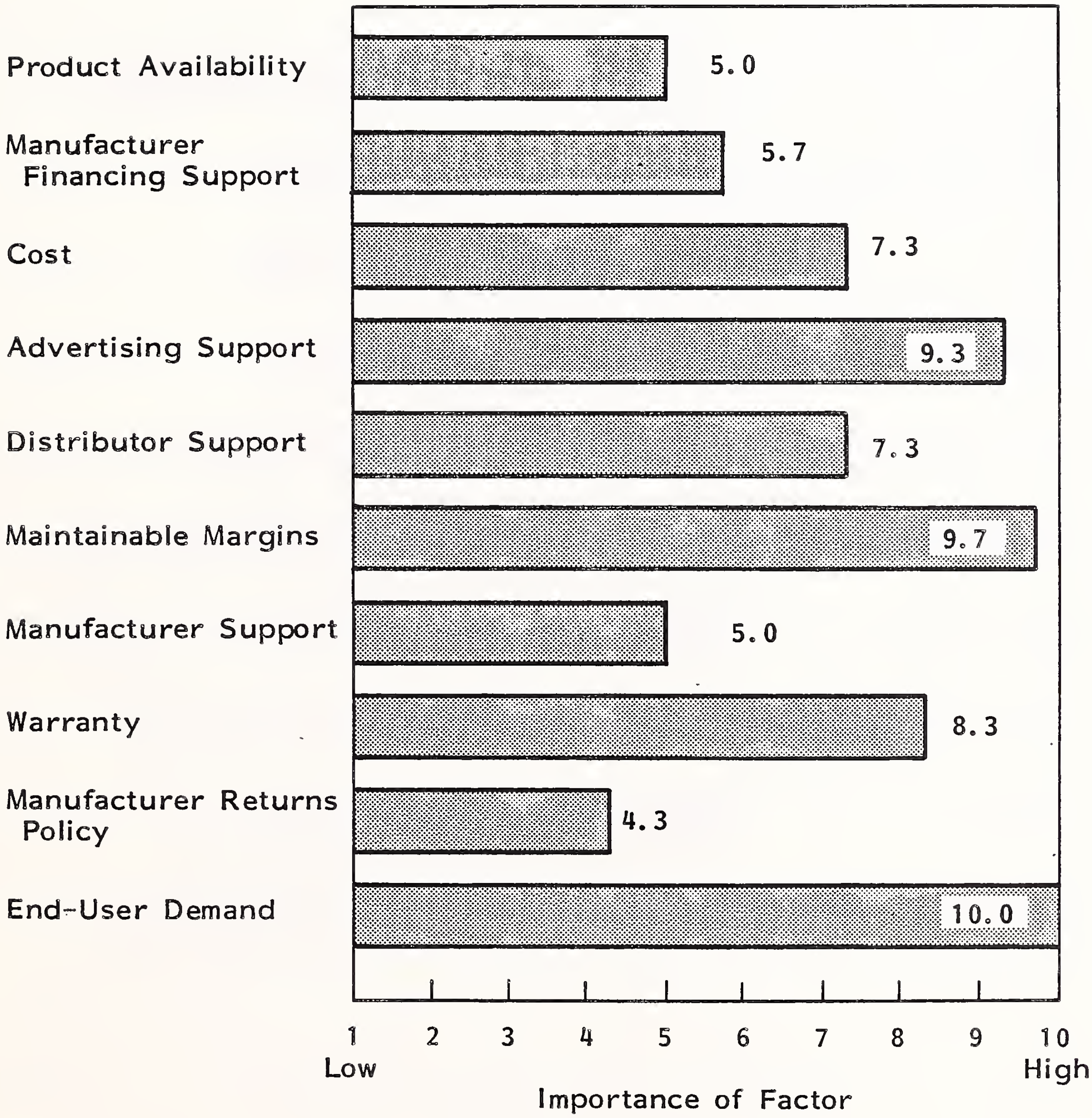


EXHIBIT III-5

RETAILER STOCKING FACTORS

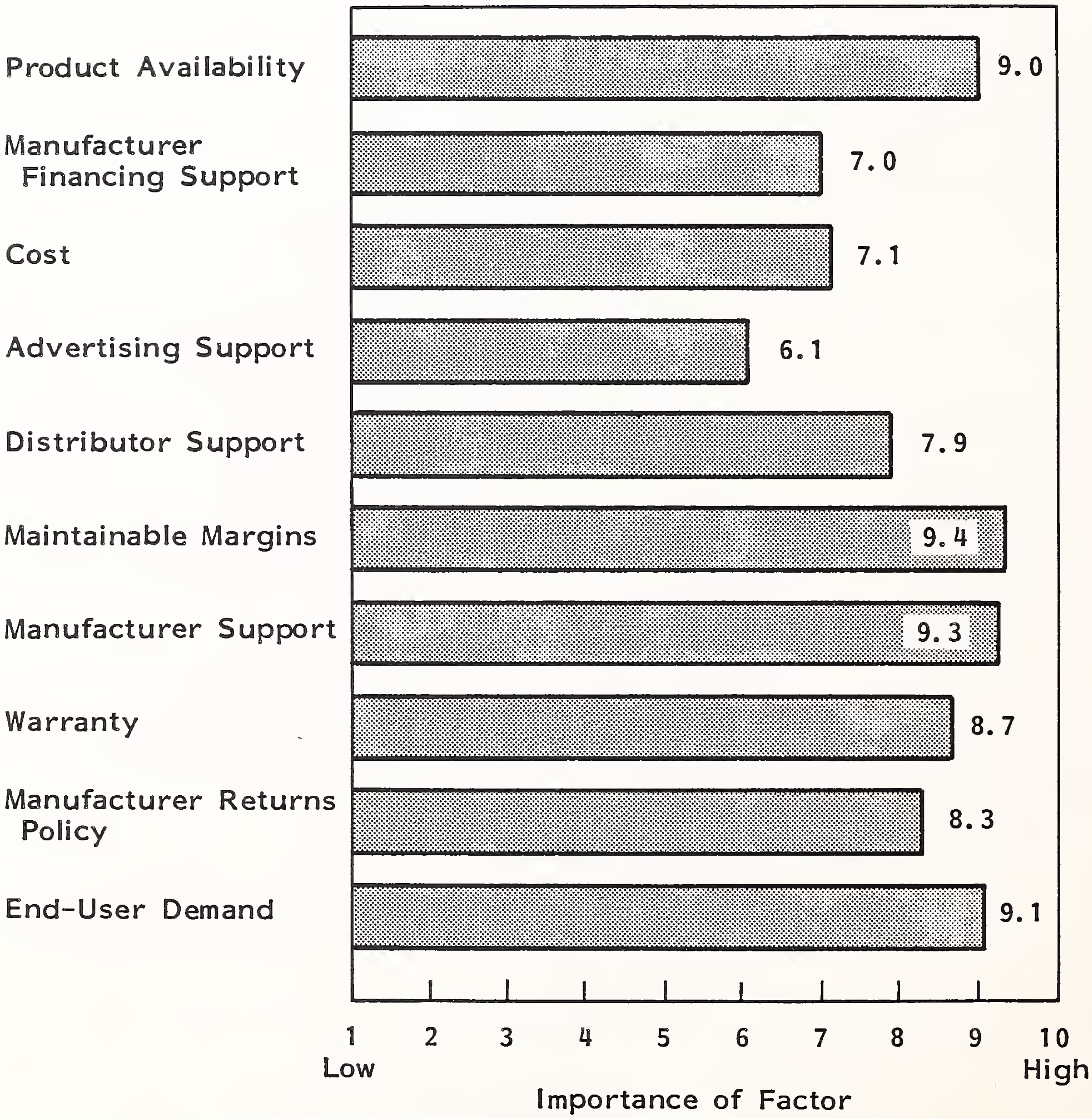
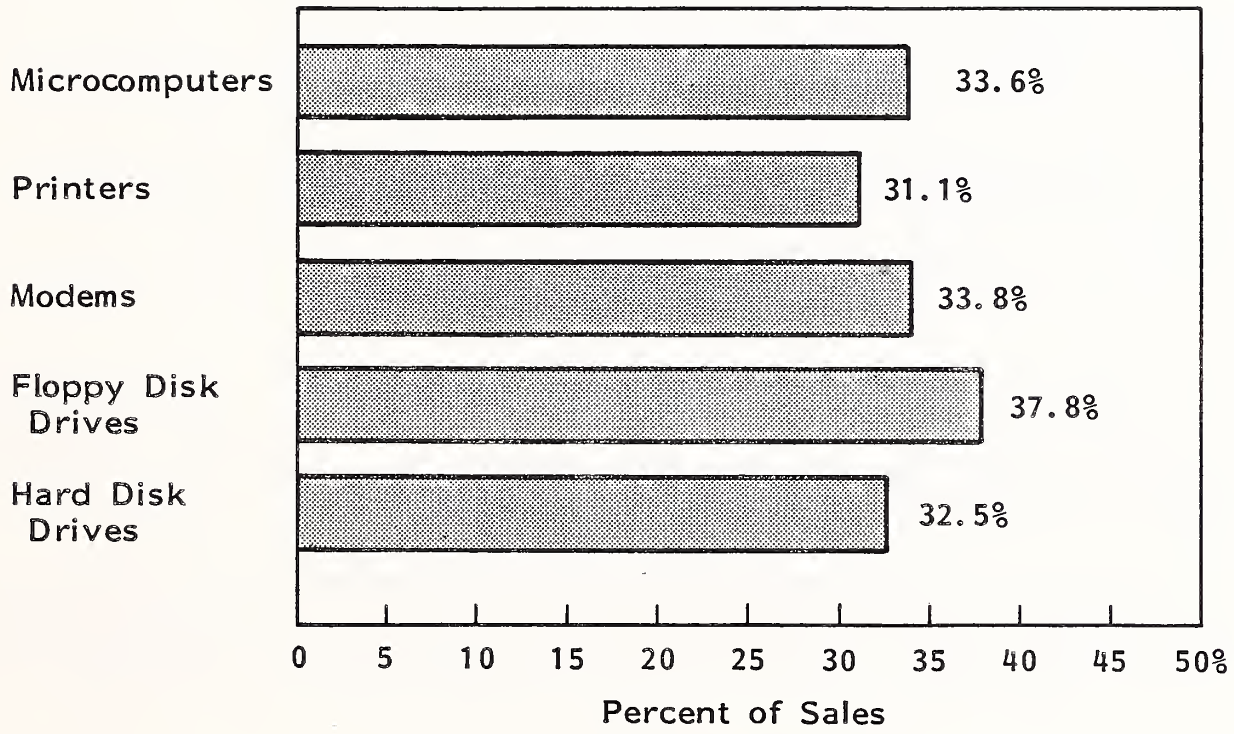


EXHIBIT III-7

RETAILER MARGINS



- Retailers and mail-order firms--in contrast to distributors--make their largest margins on floppy disk drives. See Exhibit III-7 for data on retailer margins and Exhibit III-8 for comparable data from mail-order firms.

5. DIRECT SALES BY MANUFACTURERS

- As already noted, computer manufacturers--especially IBM--are becoming much more successful at direct sales of their PC products. The early corporate PC purchasing environment was chaotic, with individual departments acquiring PCs from retail stores for particular applications within their own departmental budgets.

- Increasingly, DP departments of major corporations are centralizing PC purchasing and going directly to manufacturers for PCs.

6. OFFICE PRODUCTS DEALERS

- Only a small proportion of office products dealers are now selling office computer systems.

- However, as computer systems with more functions and standardized software are coming onto the market, office products dealers are expected to become more aggressive.

C. THE ROLE OF SYSTEM INTEGRATORS

- System integrators resell specific applications solutions, adding value (hardware or software, training, service, and support) in a way that promotes their market expertise in a given industry. They tend to be smaller firms with only a local or regional presence. They have prospered due to products, local service, and the local presence that allows face-to-face contact.

- These firms typically got their start selling minicomputer systems, often purchased from DEC. They began losing sales to supermicros and PCs, so they expanded their lines at the low end to include PCs.

- The micro and supermicro will really open the very small establishment market. For the first time, the price of a computer system is within reach for these potential buyers. This creates an opportunity for small-system integrators to capture a large market.

- The growth of microcomputer sales through system integrators or value-added remarketers (we use the two terms interchangeably in this report) is explosive. This channel has often been touted as the savior of smaller or new manufacturers; the theory is that entering this marketplace is relatively easy and provides an ideal entry into untapped vertical markets. See Exhibit III-9 for a list of vertical markets addressed by system integrators.

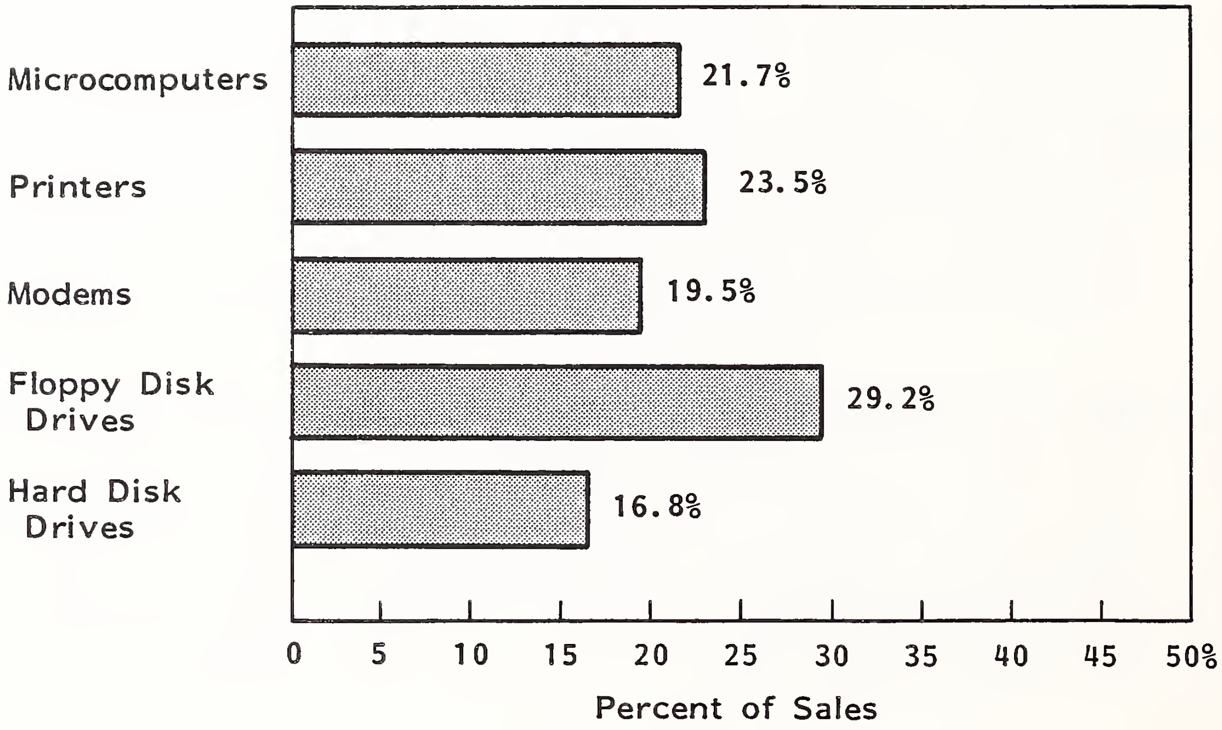
- INPUT discovered, in its survey for this report, that the situation is less encouraging for small start-up manufacturers, especially manufacturers of components or subsystems. While system integrators are definitely increasing their PC sales, they are growing less inclined to purchase products from multiple manufacturers. This trend is an advantage to the manufacturer that can provide complete systems.

- System integrators indicated a very strong preference for single sources for all their computer hardware—computers or peripherals. The preferred single source was usually a manufacturer--not a distributor. The preference for single sources is more frequent in the smaller companies that don't have the skill in procurement found in larger companies.

- At the same time, the more dominant PC suppliers, like IBM, are expanding their product lines so that there are fewer specialized product niches available to new market entrants. The result is that system integrators will be able to make good their wishes for single sourcing for hardware.

EXHIBIT III-8

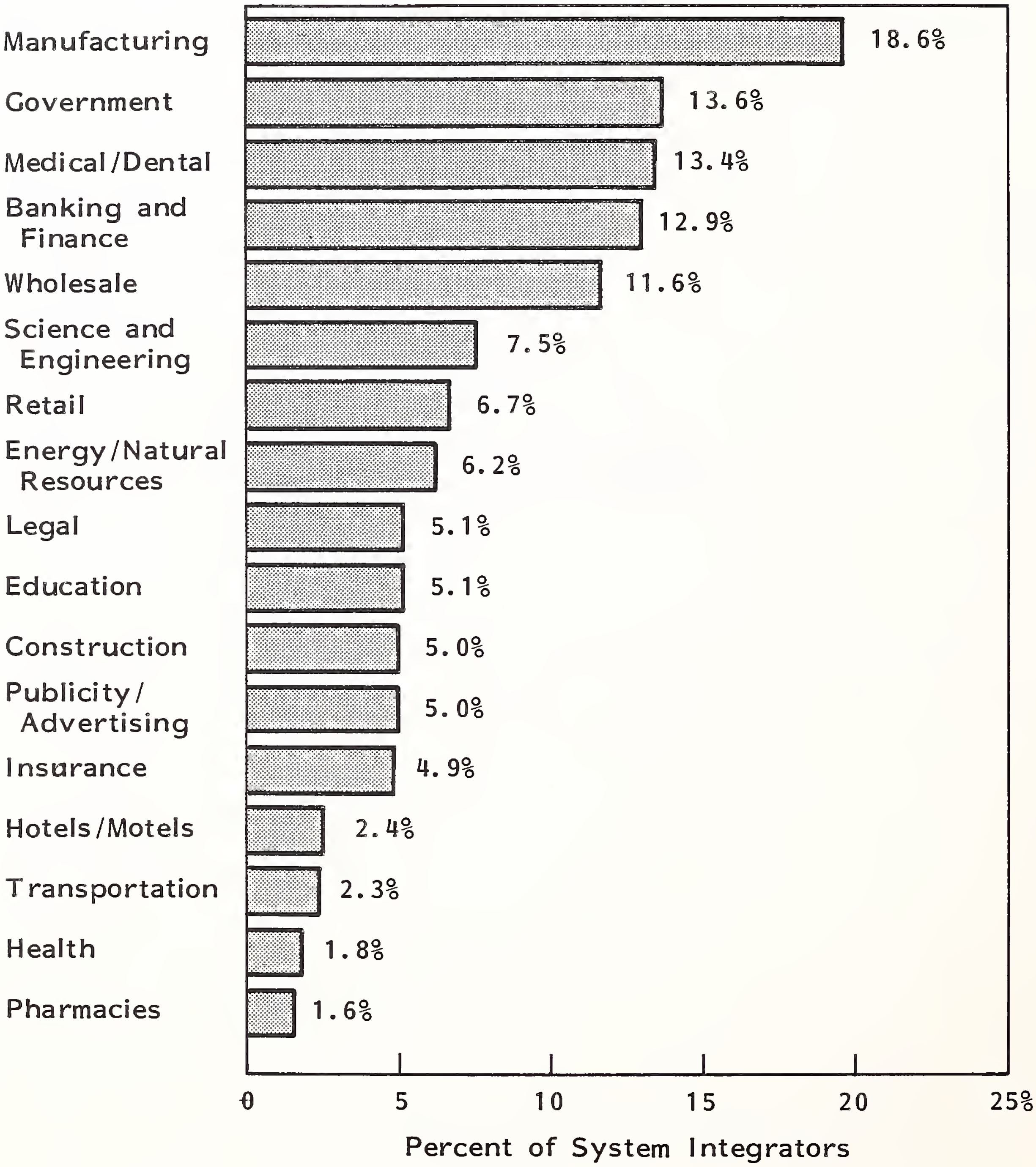
MAIL ORDER MARGINS



- There are currently over 3,000 system integrators in the United States. Segmentation of this group would probably yield five segments, 300 to 500 companies, that Oki could viably address to develop a unique distribution channel.

EXHIBIT III-9

MARKETS ADDRESSED BY SYSTEM INTEGRATORS



IV ANALYSIS OF THE PBX MARKET

IV ANALYSIS OF THE PBX MARKET

A. MARKET GROWTH AND DEVELOPMENT

- The PBX market is growing only modestly. In 1983, it was roughly $3 billion; by 1988, it will have grown to about $3.4 billion, representing a 2.8% average annual growth rate, as shown in Exhibit IV-1.

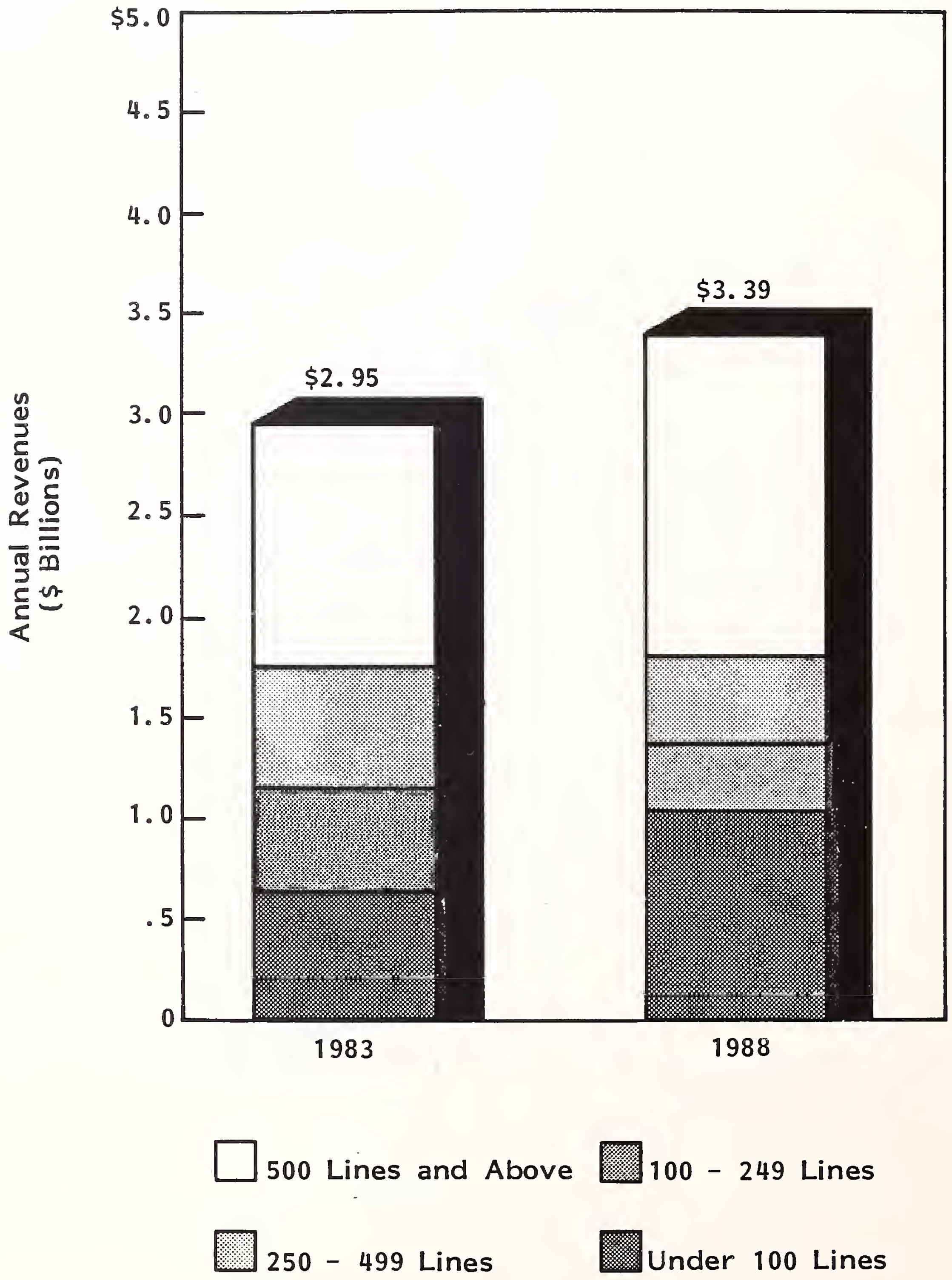
- Underneath this placid exterior, however, lurks an agitated marketplace with multiple opportunities. The character of the marketplace is shifting radically on many fronts: technically, with increased emphasis on data communications; by product line, with substantial increases in shipments of both low-end and high-end voice data integrated PBXs; and in distribution, where the AT&T divestiture continues to create confusion.

- The increasing complexity of long distance, data and other network services and support, and tariff confusion in the wake of the AT&T divestiture have combined to create a need for extensive traffic engineering, network diagnostics, and administrative cost-reporting systems within the PBXs.

- Efficiencies of digital technology, burgeoning data communications requirements, and greater availability of data transmission facilities have spurred the growth of digital PBXs.

EXHIBIT IV-1

U.S. PBX REVENUES, 1983-1988
(BY LINES IN SYSTEM)



- In addition, office automation is taking off in American businesses, causing increasing needs for business communications products and data processing equipment. In particular, sophisticated integrated voice/data PBX systems will be needed to support automated offices. Open systems architectures will be preferred so that users may interface a variety of diverse products.

- PBX design efforts are now focused on integrating PBXs with local area networks (LANs).

- Major PBX suppliers are protecting their large installed bases by providing hardware and software enhancements to older PBX designs; this migration strategy also applies, to a limited extent, to the RBOCs, which are enhancing their Centrex services in an effort to maintain their Centrex customer bases. In spite of these efforts, however, well over half the current Centrex systems will probably be replaced by PBXs in the next four years.

- PBX vendors are planning to supplement their current PBX equipment revenues by marketing sophisticated voice/data workstations, software enhancements and new office automation applications.

- A shakeout of PBX suppliers is inevitable. Survivors will be the firms that provide a range of voice and data features, offer competitive prices, are well supported, and are marketed through effective channels of distribution. Another critical factor is marketing intelligence to analyze in-depth the product trade-offs relative to features and price.

- PBX and computer manufacturers are teaming up frequently now. These relationships offer PBX makers a tight link with information processing environments as well as strong distribution channels; computer manufacturers, on the other hand, gain access to voice applications.

- A 5% per year price erosion can be expected; vendors are already under tight margin pressure.

- Consistent with trends in the information services marketplace, vertical markets are increasingly attractive outlets for PBX vendors. InteCom has had great success in the multitenant market, for example.

B. DISTRIBUTION CHANNELS

- About 14% of all PBXs are now distributed through independent telephone companies. Twenty-four percent are distributed through AT&T and the RBOCs. Sixty-two percent are distributed through interconnect companies.

- AT&T is the largest PBX manufacturer, evidenced in Exhibit IV-2, and distributes almost exclusively through its own sales force.

- Northern Telecom, the next largest manufacturer, recently made a major change in its distribution policy by rechanneling its end-user products in 12 southern and southwestern states from its own direct sales force to RBOCs, the independent telephone companies, and interconnect companies.

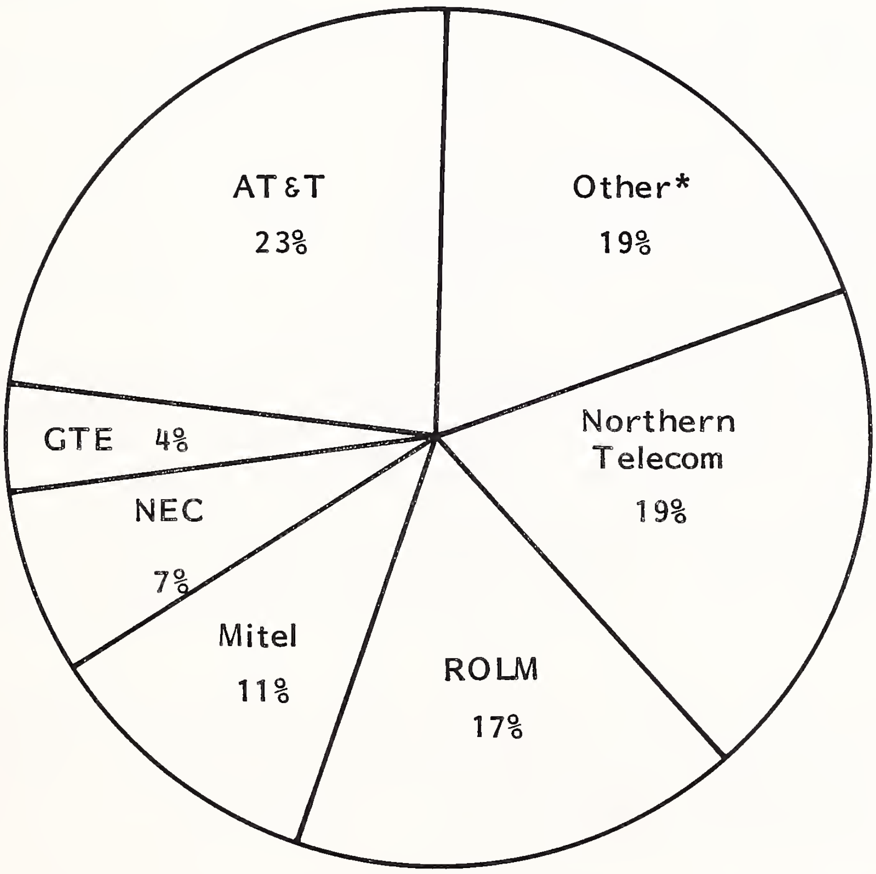
  - It will still maintain national accounts in these states, with accounts using its SL-1 and SL-100 products. Otherwise Northern Telecom will deal through the new channels.

  - This move by Northern Telecom was designed to cut overhead costs associated with direct sales and PBX maintenance.

- ROLM, the third largest corporation, derives 70% of its revenues from ROLM Operation Companies. ROLM believes that service levels from RBOCs will deteriorate in the post-divestiture environment, and ROLM is looking to fill the void with a comprehensive, solid end-user capability using the RBOCs. ROLM's emphasis on end-user support of its products has placed it at the top

EXHIBIT IV-2

1983 U.S. PBX MARKET SHARES BY MANUFACTURER
(BY NUMBER OF LINES SHIPPED)



*Other:
American Telecom = 3%
Siemens = 3%
United Technologies = 3%
Other = 3%
InteCom = 2%
Oki = 2%
Solid State Systems = 2%
Hitachi = 1%

of non-Bell PBX suppliers in terms of product and service capability. ROLM is taking on AT&T and the RBOCs more directly than any other PBX manufacturer, at least with regard to direct end-user selling.

- All the RBOCs have or will soon be setting up separate unregulated subsidiaries or separate divisions to market enhanced services and customer-premise equipment, including PBXs. These new organizations are not allowed to manufacture PBXs but are eager to market them. There is, in addition, some bitterness against AT&T in the RBOCs related to the divestiture, and non-AT&T suppliers are said to have an edge over AT&T in new supplier contracts.

C. ROLE OF THE SYSTEM INTEGRATOR

- The PBX marketplace is already dominated by system integrators, if the definition includes the RBOCs and independent telephone companies that distribute but do not manufacture PBXs. Indeed, just about the only manufacturers who actually distribute their own products directly to end users are AT&T and ROLM. Retail distribution of PBXs is essentially nonexistent.

- As noted earlier, system integrators are increasing their dominance. Major manufacturers—such as Northern Telecom—are shifting from direct sales to distribution through integrators.

- The reason for this dominance is the increasing complexity of PBX systems. PBX services include not only installation of equipment, but consulting on the minimization of long distance and data communication charges, local area network interfacing, and many other services. Single PBX companies are simply overwhelmed by the requirements of PBX services.

D. FORECASTED CHANGES IN DISTRIBUTION CHANNELS

- AT&T's divestiture of the seven RBOCs has opened up a tremendous new channel to non-AT&T manufacturers. The RBOCs are actively seeking new equipment suppliers and are becoming major distributors of non-AT&T products. Given RBOC resource constraints and the lucrative character of the high-end market, the RBOCs are expected to concentrate their energies at the high end.

- AT&T's Information Systems division is its new PBX marketing arm. Its primary means of generating sales is through replacement of its installed base of older systems. AT&T is evolving what may be termed an "aggressive defense" strategy: it is actively protecting its installed base by forming "SWAT teams" to counter competitors threatening to pick up existing AT&T customers. When AT&T hears that a customer is considering another company's PBX, a "SWAT team" descends on the customer to offer special deals.

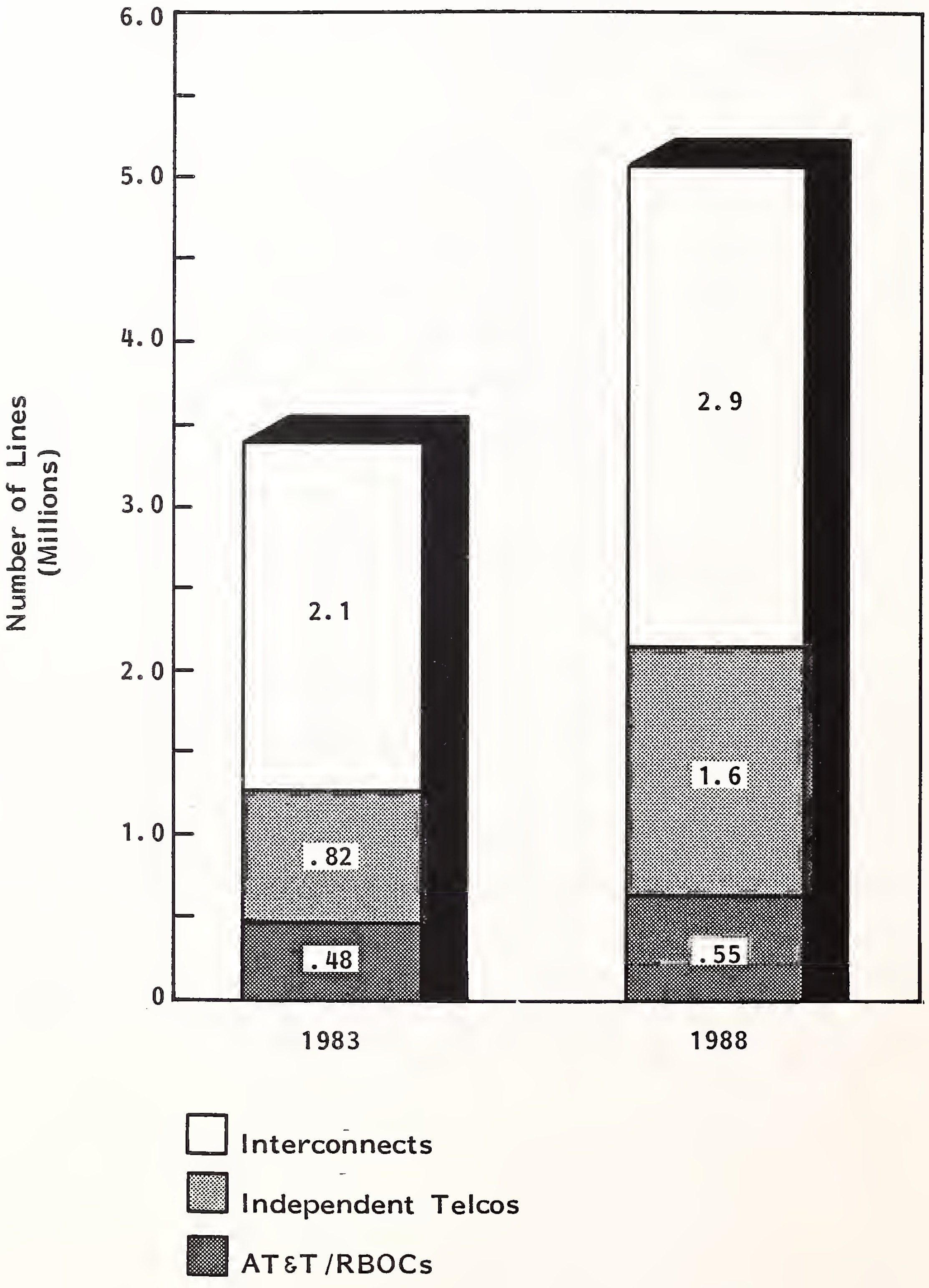
- AT&T is also encouraging upward migration by increasing rates on older PBXs as much as 70%.

- AT&T's defensive strategies, its enormous customer base, and its willingness to provide more competitive products—often manufactured outside the company—will prevent it from losing a substantial market share, as can be seen in Exhibit IV-3. The RBOCs should do fairly well because some major suppliers such as InteCom and Northern Telecom will shift to using RBOCs as their primary channels of distribution.

- The interconnects will lose share to the RBOCs and AT&T, primarily because of the loss of PBX suppliers to AT&T and the RBOCs.

EXHIBIT IV-3

U.S. PBX GROWTH AND MARKET SHARE TRENDS
BY MAJOR DISTRIBUTION CHANNELS, 1983-1988
(BY NUMBER OF LINES SHIPPED)



INPUT

- The independent telephone companies (independent telcos) will maintain a flat share of the PBX market.

E. PROMOTIONAL METHODS

- Few PBXs are promoted directly to end users in an aggressive fashion. This is because system integrators play such an important role in deciding which manufacturer's PBX a user will get. The only companies strongly promoting their products to end users are AT&T and ROLM. AT&T is making substantial use of television; ROLM has targeted general business magazines for the bulk of its ads.

- Several advertising agencies fault ROLM for its advertising, which they believe is not as good as the firm's products.

- As shown in Exhibit IV-4, PBX vendors eschew computer-oriented publications but favor trade shows as promotion vehicles. They consider vertical market shows and NCC to be most effective, as shown in Exhibit IV-5.

- PBX vendors singled out in-flight airline magazines as particularly good advertising vehicles for PBXs because they reach a high-level executive audience--the very individuals who typically approve PBX purchase decisions.

F. SALES METHODS OF VENDORS INTERVIEWED

1. HITACHI

- Hitachi makes virtually no direct sales to end users. In the past, it distributed exclusively through interconnect companies, but it is now selling its new

EXHIBIT IV-4

EFFECTIVENESS OF ADVERTISING IN THE PBX MARKETPLACE

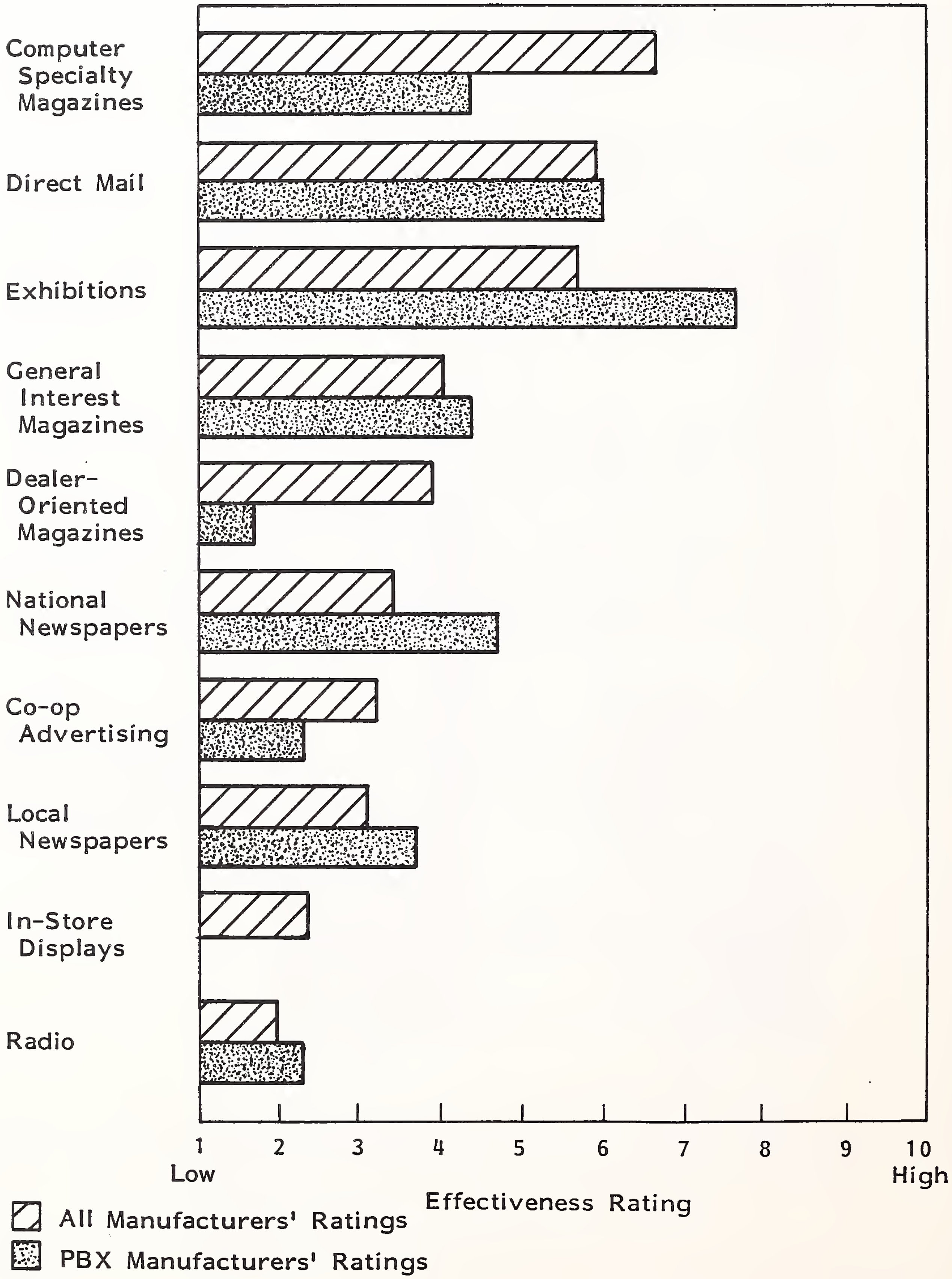
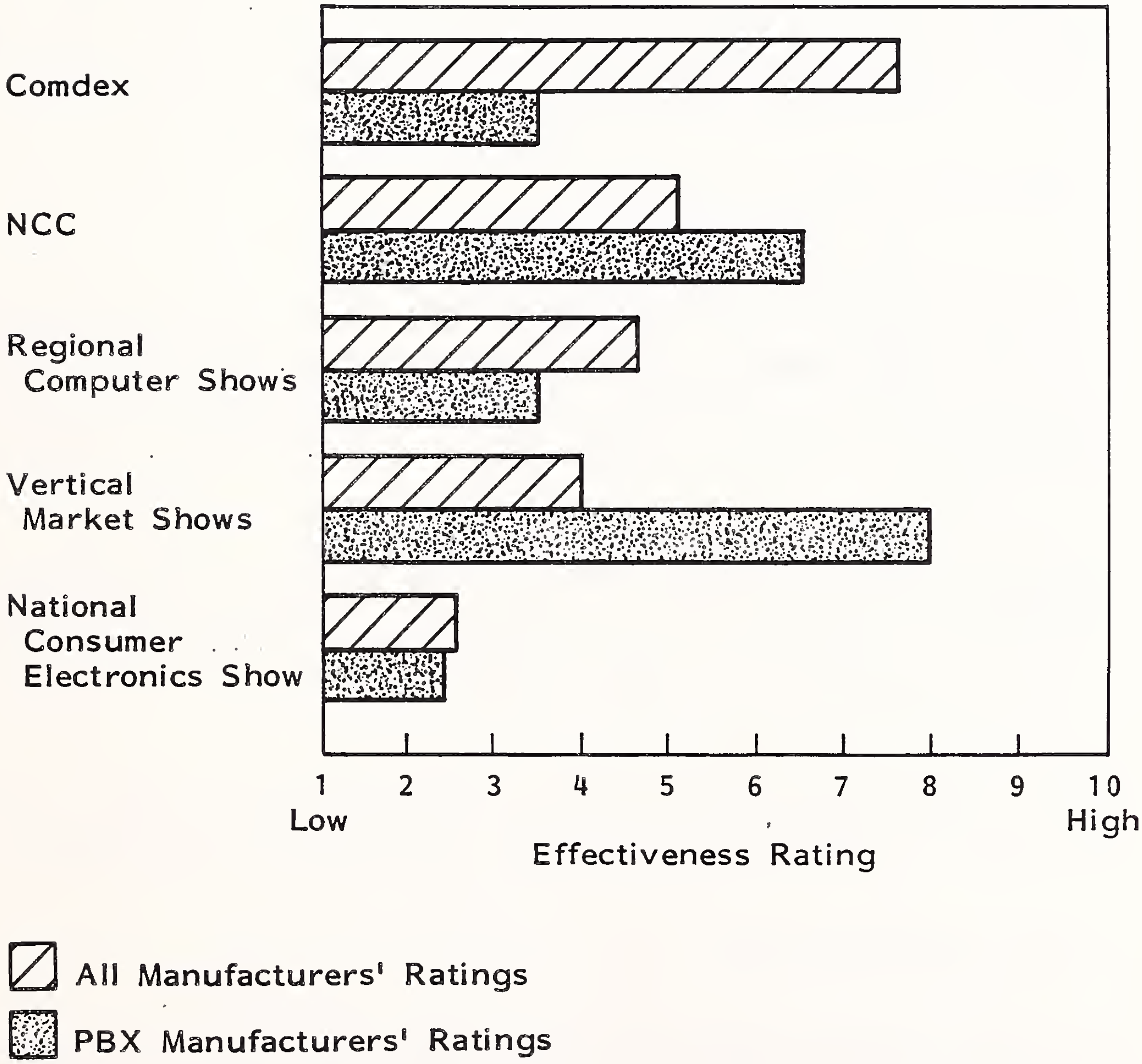


EXHIBIT IV-5

EFFECTIVENESS OF TRADE SHOWS IN PROMOTING PBXs



digital DX PBX directly to Fortune 500 companies and through RBOCs and computer equipment OEMs.

- Originally, Hitachi targeted the DX line to hotels and motels, but it is now leveraging the product into other market segments by adding complementary office automation products.

- Hitachi advertises in communications journals (such as Communications News), in-flight magazines, and lodging-industry trade magazines. It establishes its advertising budget as a fixed percent of sales. it measures the effectiveness of its ads through responses to "bingo" cards and distribution sales. It does its advertising in-house and has no agency.

2. GTE AUTOMATIC ELECTRIC

- GTE Automatic Electric (GTEAE) is GTE's PBX manufacturing subsidiary. GTEAE sells its PBX products through General Telephone Operating Companies and, through GTE Business Communications Systems, to interconnect companies.

- GTEAE's advertising agency, DDB in New York, has won accolades from GTEAE for its creativity and cost-effectiveness. PR is done in-house, and the advertising budget is about 0.3% of sales.

- Advertising targets include telephone companies, network users, Fortune 100 companies, the government and military, and selected vertical markets.

3. NORTHERN TELECOM

- Northern Telecom's distribution policies have already been recounted above. About 35% of its sales are through regional distributors (interconnect companies), 30% are through independent telephone companies, and 35% are through its sales force. The share from its own sales force is expected to decline, however.

- Northern Telecom attends selected vertical market trade shows; NCC; and telecommunications-oriented shows like Interface, TCA, and ICA. Northern Telecom is not planning to participate in trade marts.

- Northern Telecom focuses its marketing communications efforts on telecommunications trade media such as Communications Week and Information System News and on IS trade publications such as Computer Decisions.

V ANALYSIS OF THE MODEM MARKET

V ANALYSIS OF THE MODEM MARKET

A. MARKET GROWTH AND DEVELOPMENT

- In 1983, \$800 million of voice-grade modems were shipped in the U.S., according to Exhibit V-1. Shipments will more than double by 1987. About \$100 million was spent on microcomputer and office-system modems last year. This expenditure will grow to about \$600 million by 1988, as shown in Exhibit V-2.

- The medium-speed voice-grade modem market (2,400 to 4,800 bps) has the largest value of the four major modem segments, according to Exhibit V-3, although low-speed modems are shipped in greater quantities (more than twice as many). High-speed modems (more than 4,800 bps) will account for less than a quarter of a million units in 1987 but will be the second highest revenue-earner due to their high average selling price.

- The following factors will contribute to modem market growth:

    - Increasing use of microcomputers as terminals by business and professional people.

    - More of these professionals connecting home computers to the corporate network.

EXHIBIT V-1

FORECAST OF U.S. MODEM SHIPMENTS

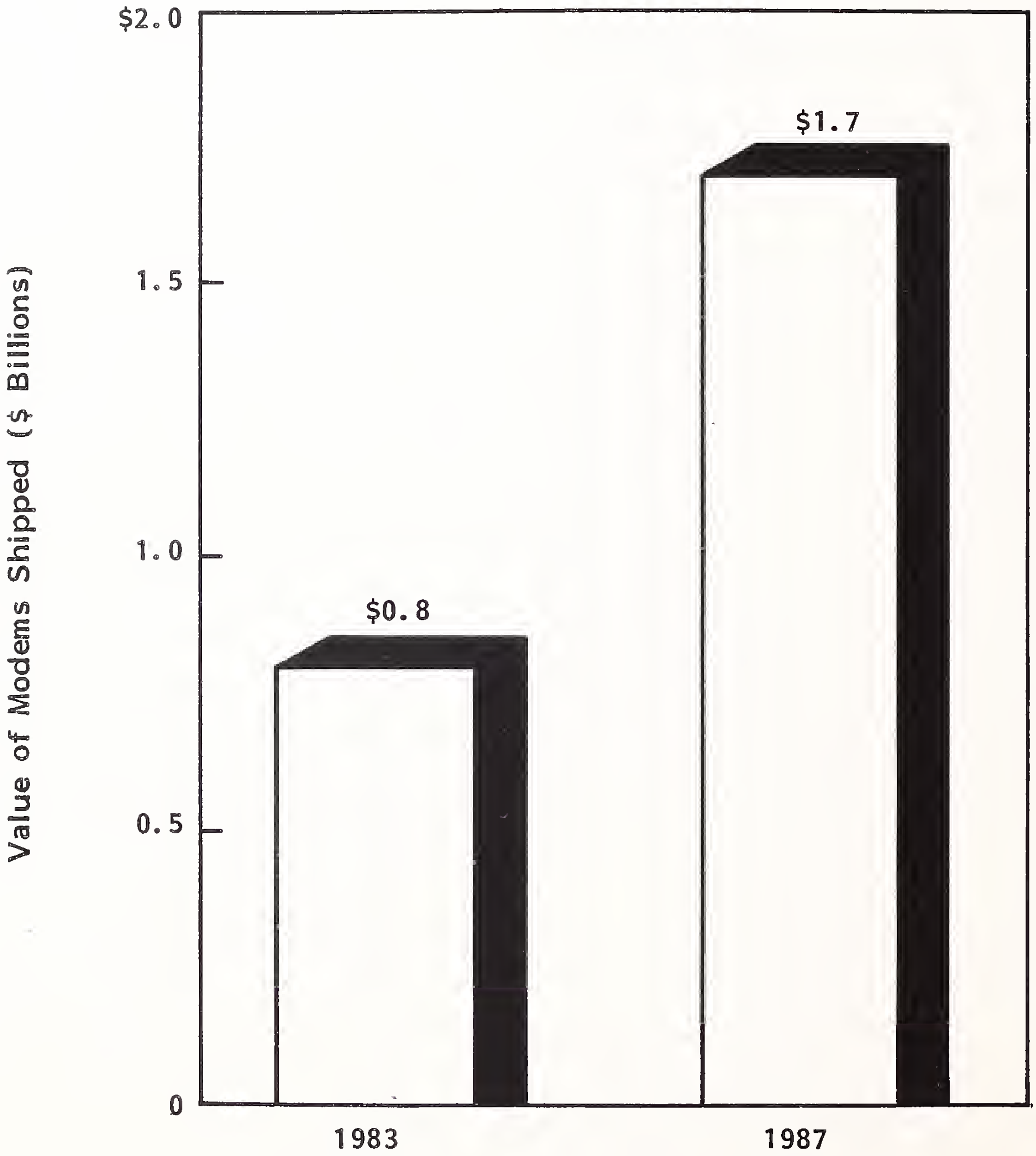


EXHIBIT V-2

FORECAST OF MICROCOMPUTER AND OFFICE-SYSTEM MODEM SHIPMENTS IN UNITED STATES

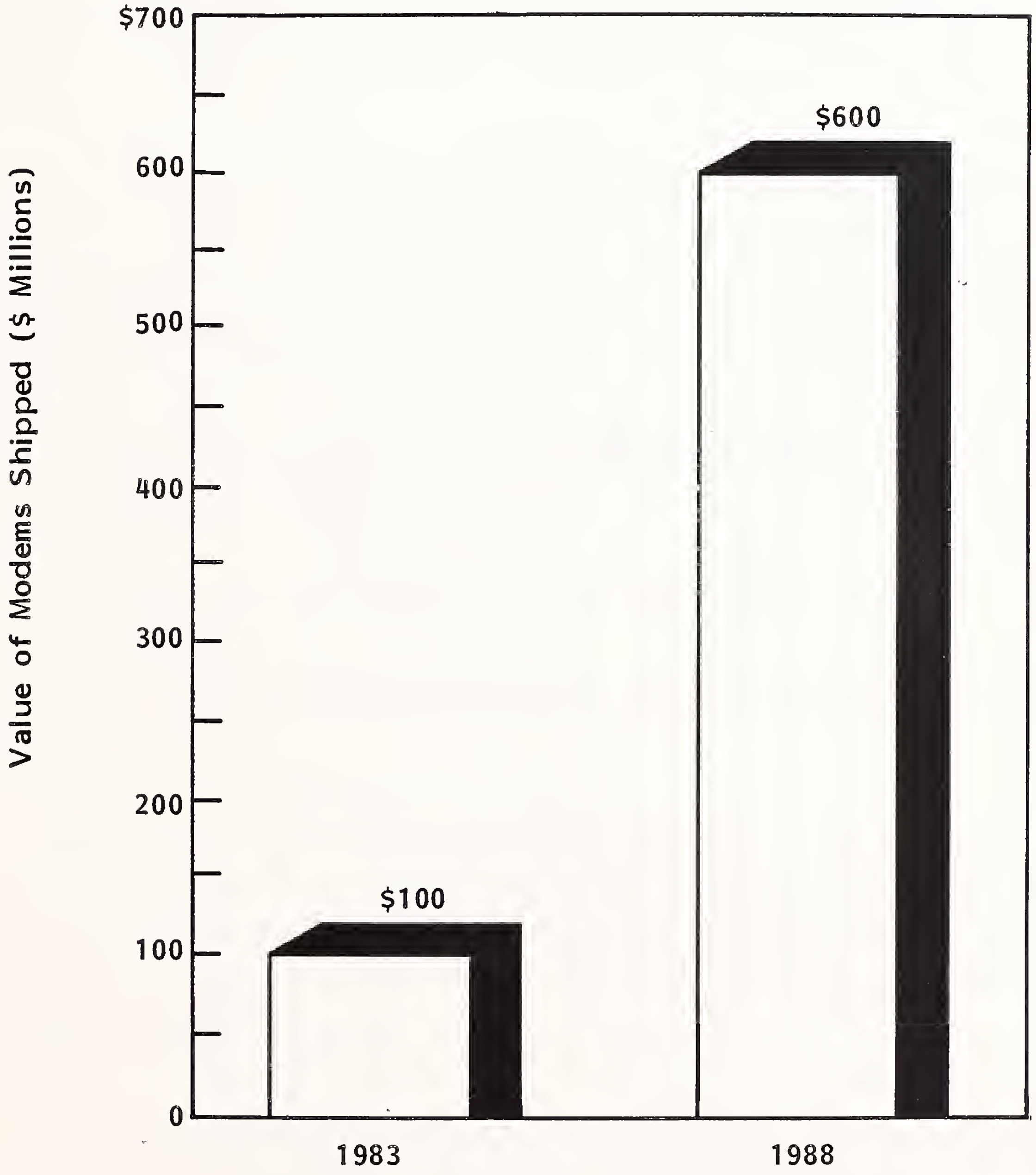
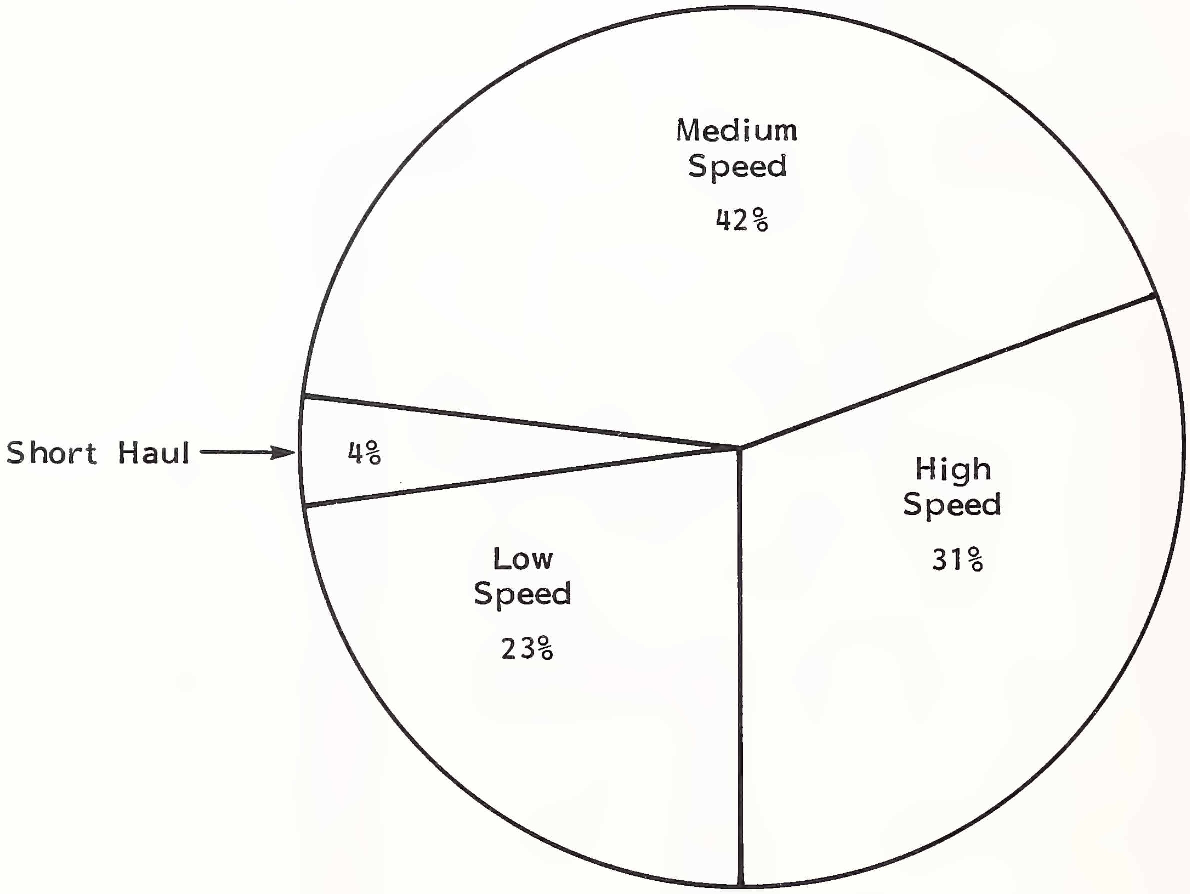


EXHIBIT V-3

BREAKDOWN OF MODEM SHIPMENTS



Percent Value of 1983 Shipments
Total Value: $800 Million

- Greater demand for and shipment of microcomputers.

- Declining prices of lower-speed modems.

- A greater variety of computer information services.

- Increasing charges for local telephone use will drive up demand for higher-speed modems, which decrease the time users need to transfer data (and to use the telephone).

- Penetration of modems into homes and businesses remains relatively low. At the end of 1982, less than 10% of the home computers in the U.S. were connected to modems. Last year, the number of home computer modems in use tripled, but there is still room for considerable expansion.

- Downward pricing pressures are growing more intense as costs decrease and competition gears up.

    - Modem chips are significantly reducing costs for modems.

    - New entrants such as Prentice are forcing market leader Hayes to drop its prices.

- The biggest threat to modem sales growth is the bundling of built-in modems into microcomputers; built-in modems are already common in portables and will be standard equipment in the majority of low-end systems by 1986. Allied with this threat is the possibility that the major microcomputer vendors—Apple and IBM—will offer unbundled modems.

- The modem marketplace is dominated more by a single vendor—Hayes—than by any of the other categories of equipment investigated in this study. Hayes commands 74% of the higher end of the market and about 70% of the overall market.

B. DISTRIBUTION CHANNELS

- Modems for office systems are sold largely through retailers and direct sales forces.

- Ninety-six percent of chain stores and 84% of independent stores stock modems. Hayes is the leading brand by a vast margin at both of these outlets.

- Last year, 64% of all dealers reported Hayes as their leading modem brand. In the most recent surveys this year, 55% cite Hayes as the best-seller; independents report 51% and chains report 64%. Novation was listed last year as tops by 6% of all dealers, but only 2% rank it highest now. U.S. Robotics's mentions as top modem seller declined from 6% to 5% over the same period.

C. ROLE OF THE SYSTEM INTEGRATOR

- System integrators bundle modems into their offerings depending upon the applications they are selling. They purchase their modems largely from traditional OEM modem suppliers--in particular, Racal-Vadic. (Racal-Vadic is now aggressively entering the retail modem business.)

- At present, relatively few office-system modems are sold through system integrators.

- System integrators say they would prefer to purchase modems from their computer suppliers. They are anticipating the bundling of modem chips into PCs.

D. FORECASTED CHANGES IN DISTRIBUTION CHANNELS

- The modem vendors interviewed by INPUT identified two important trends in the distribution of modems.

- OEMs and system integrators will grow more important.

  - They will bundle modems into their offerings more frequently. Hayes is attempting to accelerate this process by marketing its modems as cheap substitutes to local area networks. In general, fewer modems will be sold in retail stores (as a percent of total modem sales).

  - Meanwhile, system integrators' share of the overall market for computer hardware will be increasing, so their share of the modem market will be getting two powerful boosts.

- Manufacturers are increasing their vertical integration and can be expected to more aggressively market modems as part of their complete product lines. The computer manufacturer shakeout now underway will result in fewer manufacturers having much more comprehensive product offerings than we see today.

- Individual users are becoming increasingly sophisticated and are demanding more choice in modem purchases.

- Large user firms will increasingly buy directly from modem manufacturers.

- Direct sales and catalogue sales will increase their shares of the modem marketplace.

E. PROMOTIONAL METHODS

- In general, respondents indicated that advertising and promotion to end users has been substantially less important for modems than for other peripherals. The role of the retailer, however, is correspondingly much more important.

- Most users perceive modems as being incomprehensible "black boxes." They do not trust their own judgments to know which modem is best, so they rely very heavily on the dealer to make their modem purchase decisions.

- But sales promotion is becoming increasingly important in marketing modems--especially in the form of on-line data base (OLDB) coupons, which several OLDB vendors (including Dialog and The Source) are offering in modem and communications software packages.

  - These coupons offer as much as $200 in free access time on these vendors' data bases.

  - The coupons are powerful tools for the vendors, which have found that a few hours free use of their data bases almost always leads to substantial follow-on billable use.

  - At the same time, manufacturers including the coupon in their packaging are not charged by the OLDB vendors and thus have a free compelling sales aid.

- Hayes is frequently cited as the vendor with the best promotion. Hayes advertises in appropriate magazines, has well-orchestrated press relations, a good dealer and co-op advertising program (co-op advertising can greatly strengthen dealer relations, the key success factor in the modem marketplace), and excellent packaging.

- Racal-Vadic had a reputation for being one of the worst advertisers in the modem business. This was consistent with its OEM distribution policies. Now that it is moving into retail channels, its advertising has improved dramatically; its current ads, running in Business Week, Forbes, and other major business magazines, feature the lines: "For 15 years, we've been making the world's most popular modems. Now you can buy one." This very effectively communicates to potential customers why they haven't seen Racal-Vadic modems on retail shelves earlier and why they should strongly consider them now.

- The perception of modem manufacturers of the effectiveness of various advertising media differs most from all manufacturers in co-op advertising, as can be seen in Exhibit V-4. This reinforces the point made earlier about the importance of co-op advertising in building dealer loyalty.

- Advertisers see substantially more promise in in-store displays and demonstrations than modem manufacturers, suggesting a possible neglected opportunity.

- Modem manufacturers rate the effectiveness of regional computer shows substantially higher than do all manufacturers. See Exhibit V-5. This is probably due to the higher attendance of dealers—particularly independents and local chain representatives—at regional shows. Otherwise, they rate shows much as other vendors.

F. SALES METHODS OF VENDORS INTERVIEWED

1. AT&T INFORMATION SYSTEMS

- AT&T Information Systems sells 99% of its modem products through regional distributors; it has divided the U.S. into five districts and has apportioned territories correspondingly. One percent of its sales are through its national

EXHIBIT V-4

EFFECTIVENESS OF ADVERTISING IN THE MODEM MARKETPLACE

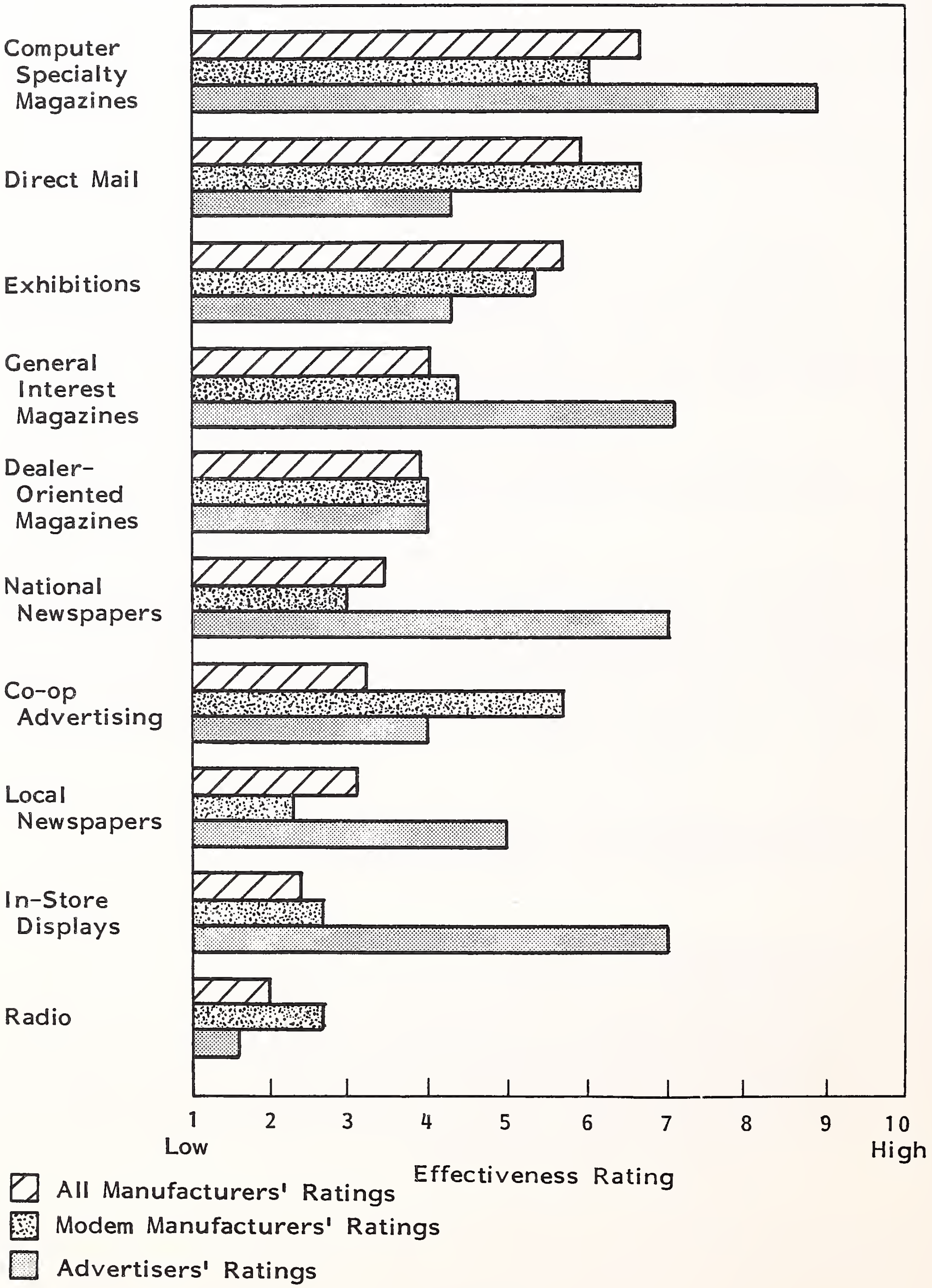
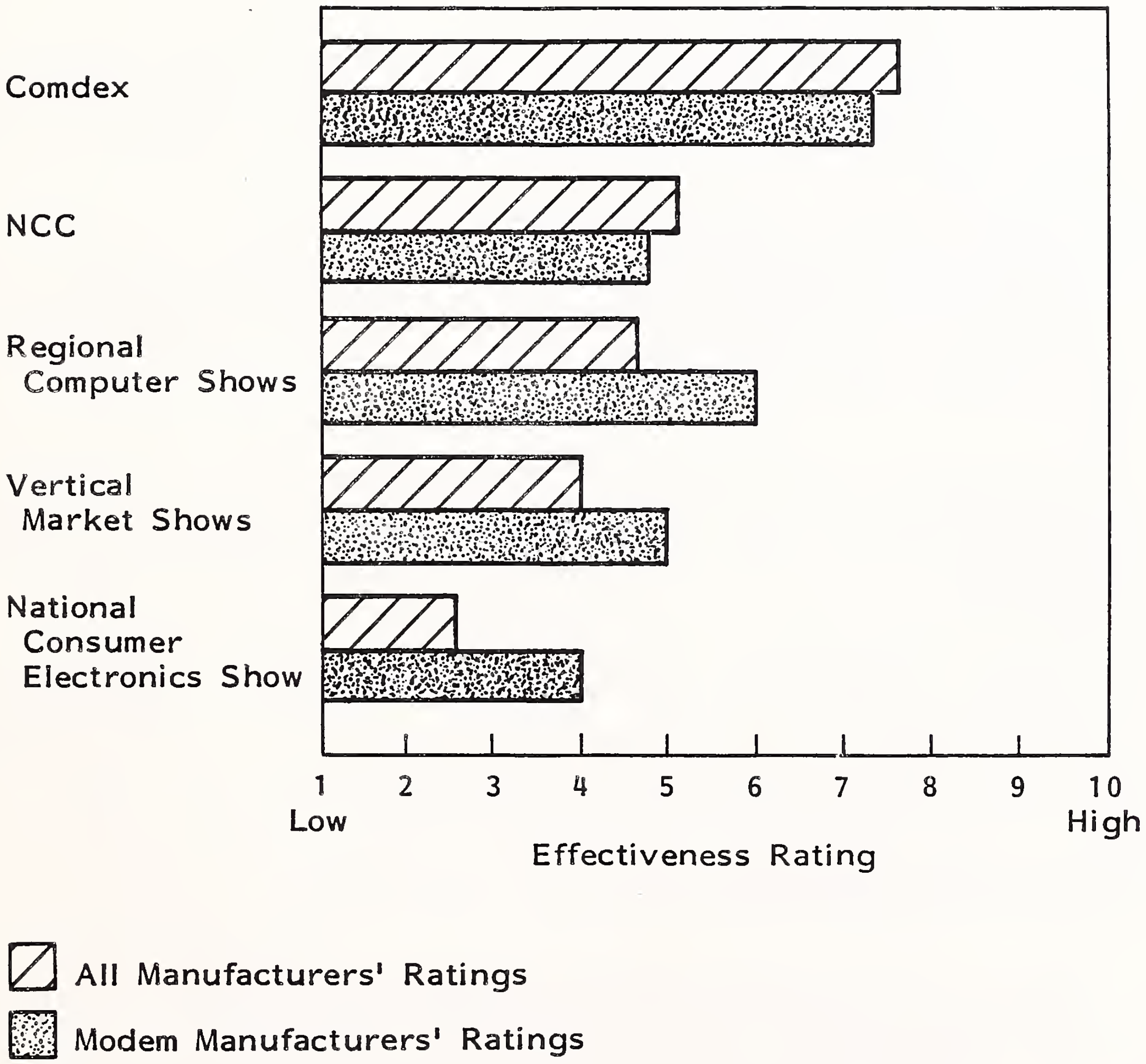


EXHIBIT V-5

EFFECTIVENESS OF TRADE SHOWS IN PROMOTING MODEMS



sales center. In a new thrust, AT&T is beginning to market modems through national chains (such as Sears) and value-added remarketers.

- AT&T advertised its modems very little in the past because of its large sales force. With its new reliance on retail sales, it has reversed this policy and will start advertising on a large scale. It uses the objective-and-task method in calculating its budget.

2. GANDALF DATA, INC.

- Fifty percent of Gandalf's modem sales are to manufacturers' representatives, 2% are to OEMs, and the remainder are through its sales force directly to large end users.

- Gandalf's advertising is done in-house. It targets its advertising at corporate systems purchasers and selected OEMs--particularly telephone companies. Advertising is about 1.2% of sales.

- It has a press relations agency only for its Canadian office. This agency was engaged because the agency has individuals who are close friends to Gandalf's chairman.

- Gandalf participates only in regional and vertical market trade shows. In the past it attended NCC, but it does not plan to attend in the future. It also does not plan to open a shop in the new trade marts.

3. TEXAS INSTRUMENTS

- TI distributes 20% of its products through national account distributors and 80% through OEMs.

- It sees its OEM business expanding as computer manufacturers expand their lines to include more peripherals.

- TI has engaged an advertising firm, McCann-Erickson, which it believes is especially creative but still familiar with the technology issues inherent in TI products.

- TI's PR firm is a division of McCann-Erickson and has won accolades from TI for its ability to manage relations with the technical trade press.

- TI sees trade magazines--in particular, Electronic Design News--as powerful advertising vehicles in the modem marketplace.

- TI's modem advertisements are targeted exclusively at OEMs.

- TI views Comdex as a very strong trade show, but is also attends the National Consumer Electronics Show, NCC and regional trade shows. It rates Globecom, the DEC show, especially high.

4. UNIVERSAL DATA CORPORATION

- Universal Data Corporation (UDC) distributes largely through regional and industrial distributions. It uses manufacturer's representatives to sell directly to larger end users. A few retailers and mail order houses carry the UDC line, entirely by accident since they are not authorized channels.

- UDC's advertising agency, Dayner Hall, has been serving the company for ten years, and UDC is quite pleased with it. UDS feels Dayner Hall "knows how we think." The agency has a good understanding of its client's philosophies and product line.

- UDC attends Comdex, NCC (a show which it finds "peculiar," with "ups and downs"), and Interface, a communications show put on by Comdex and where "everyone goes." It also attends vertical market shows.

- UDC is not planning to maintain a presence at the new trade marts because of their high expense.

- UDC's advertising budget is set eclectically: a budget is given by fiat each year that the product managers endeavor to enlarge each succeeding budget.

VI ANALYSIS OF THE PERSONAL COMPUTER MARKET

VI ANALYSIS OF THE PERSONAL COMPUTER MARKET

A. MARKET GROWTH AND DEVELOPMENT

- INPUT forecasts a peaking of PC sales in 1985 or 1986 as the markets for PCs—especially white collar workers--become saturated. In 1983, PCs were already on the desks of almost 6% of the U.S. white collar workers; even forecasting a dramatic decline in sales from 1987 to 1989, as INPUT has done in Exhibits VI-1 and VI-2, results in a relatively high 1989 penetration (over a quarter of all white collar workers).

- Multiuser PC sales will also peak, but this will occur as much as one or more years later than the single-user sales peak. Multiuser system sales have taken off much slower than single-user sales because of consumer uncertainties over the merits of different systems. More effective networks and network standards will help smooth the way for an increase in multiuser sales.

- More than half the personal computers sold this year were bought for personal, nonbusiness use. As of April, 11.9% of U.S. households either owned a PC or had a family member using a computer at work. Commodore computers are overwhelmingly the most popular for homes at this time.

- IBM is increasing its dominance substantially this year, evidenced in Exhibit VI-3. IBM's standards influence not only its own sales but those of its "clones," companies manufacturing IBM PC-compatible computers. These sales figures are charted in Exhibit VI-4.

EXHIBIT VI-1

FORECAST OF SINGLE-USER BUSINESS PC SHIPMENTS
IN UNITED STATES

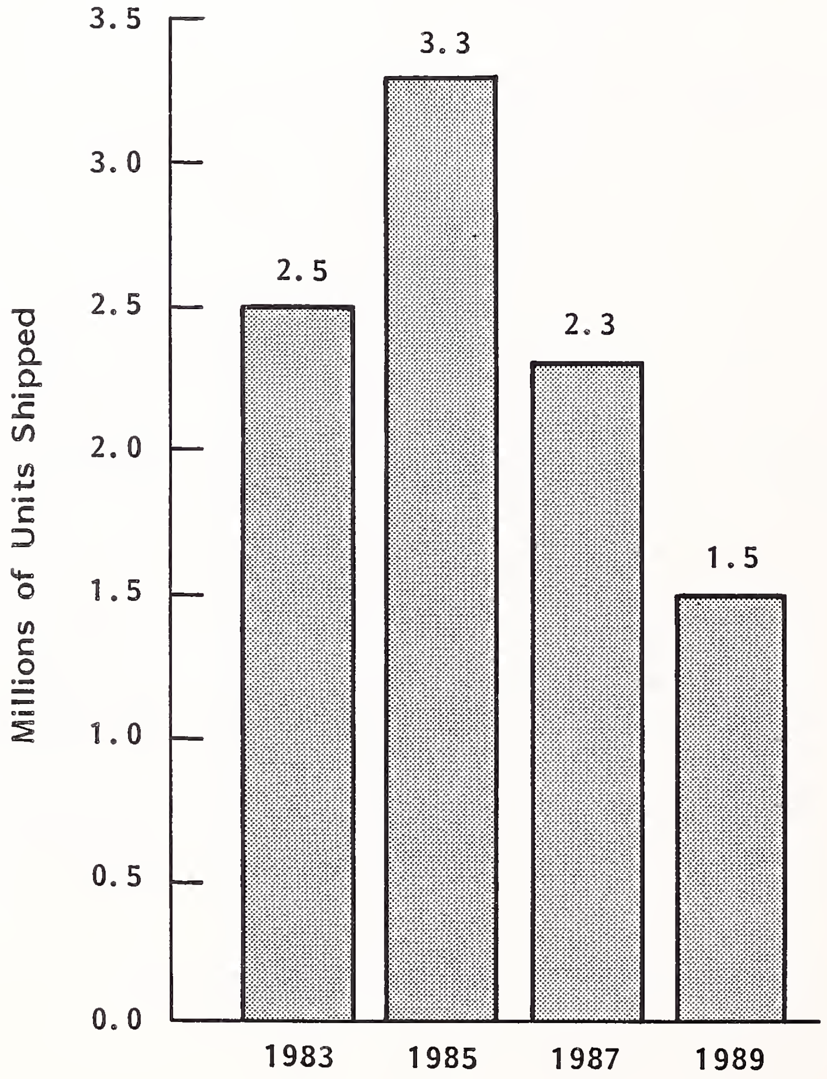


EXHIBIT VI-2

FORECAST OF SINGLE-USER BUSINESS PC SALES IN UNITED STATES

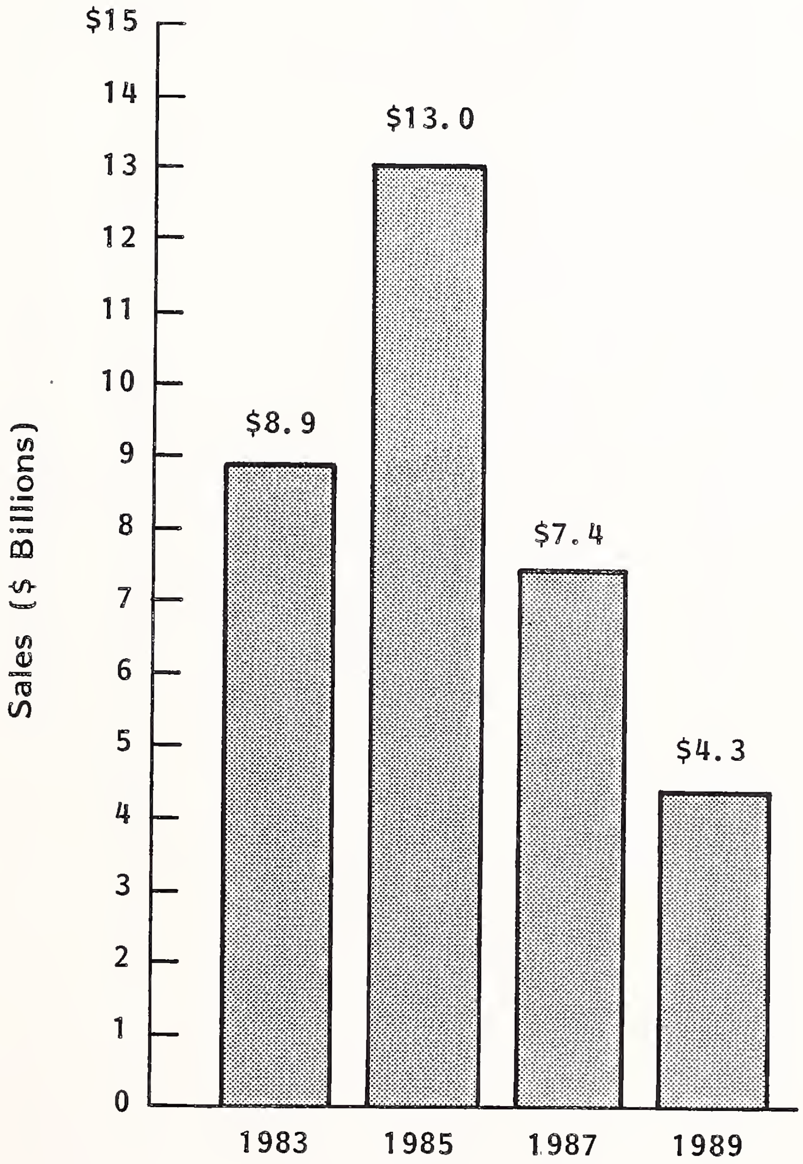


EXHIBIT VI-3

PC MARKET SHARES

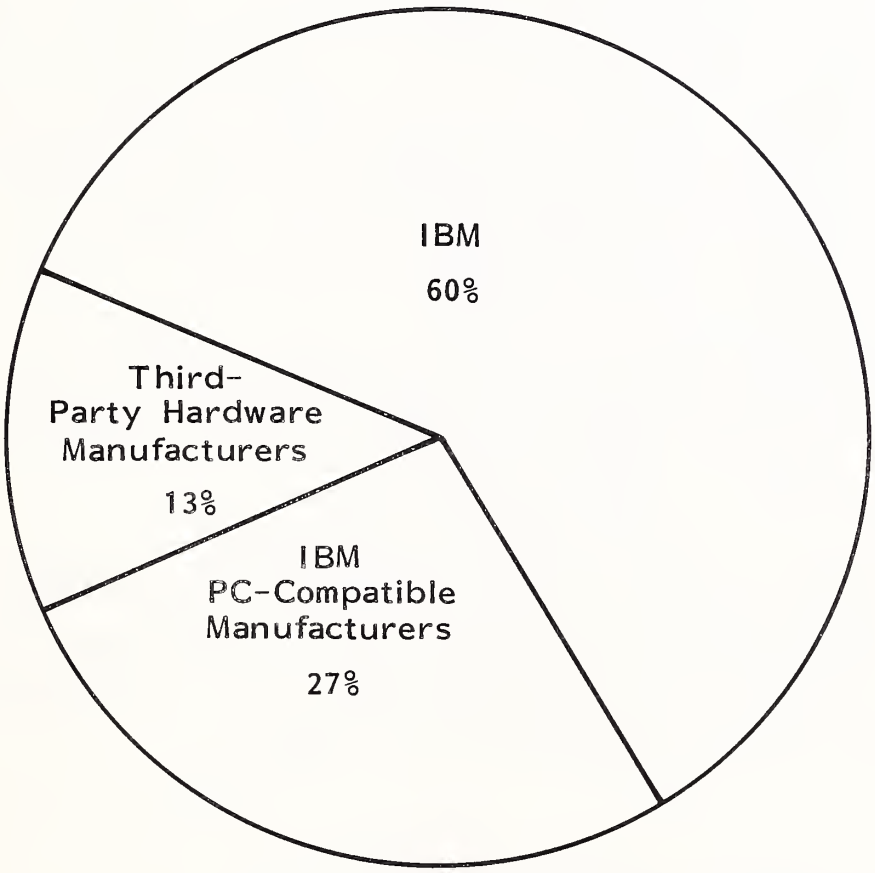
	1983 SALES (Thousand Units)	1983 MARKET SHARE (Percent)	1984 SALES (Thousand Units)	1984 MARKET SHARE (Percent)
IBM	633	22.5%	1,700	31.6%
Apple	550	19.6	1,000	18.9
Tandy	335	11.9	550	10.4
Hewlett-Packard	175	6.2	200	3.8
Kaypro	120	4.3	150	2.8
DEC	90	3.2	140	2.6
Altos	80	2.8	120	2.3
Franklin	80	2.8	150	2.8
Xerox	50	1.8	78	1.5
Commodore*	45	1.6	45	1.6
Zenith	45	1.6	58	1.1
Victor	43	1.5	10	.2
Compaq	40	1.4	110	2.1
NEC	39	1.4	92	1.7
TeleVideo	35	1.2	60	1.1
Osborne	30	1.1	-	-
Convergent	27	1.0	80	1.5
Texas Instruments	8	.3	50	.9

(All systems under $10,000. Includes home and business sales.)

*Excludes Model 64.

EXHIBIT VI-4

1983 IBM PC-COMPATIBLE HARDWARE MARKET SHARES



Total = $2.4 Billion

B. DISTRIBUTION CHANNELS

- Retail stores sell well over half the PCs sold, as Exhibit VI-5 shows. Normally, national chain stores purchase their computers directly from manufacturers, and independent stores purchase through distributors.

- Retail stores are furious with some manufacturers over the inability of manufacturers to help retailers maintain margins. IBM is currently the most maligned; it sells a number of its PC products through value-added remarketers (VARs) in addition to retailers, and these VARs are often reselling surplus PCs (IBM encourages overstocking) to unauthorized PC dealers, effectively forcing down prices in the authorized outlets.

- Retailers believe IBM can control its channels much better; they cite the example of Apple, which had similar problems a couple of years ago but moved decisively to squelch them.

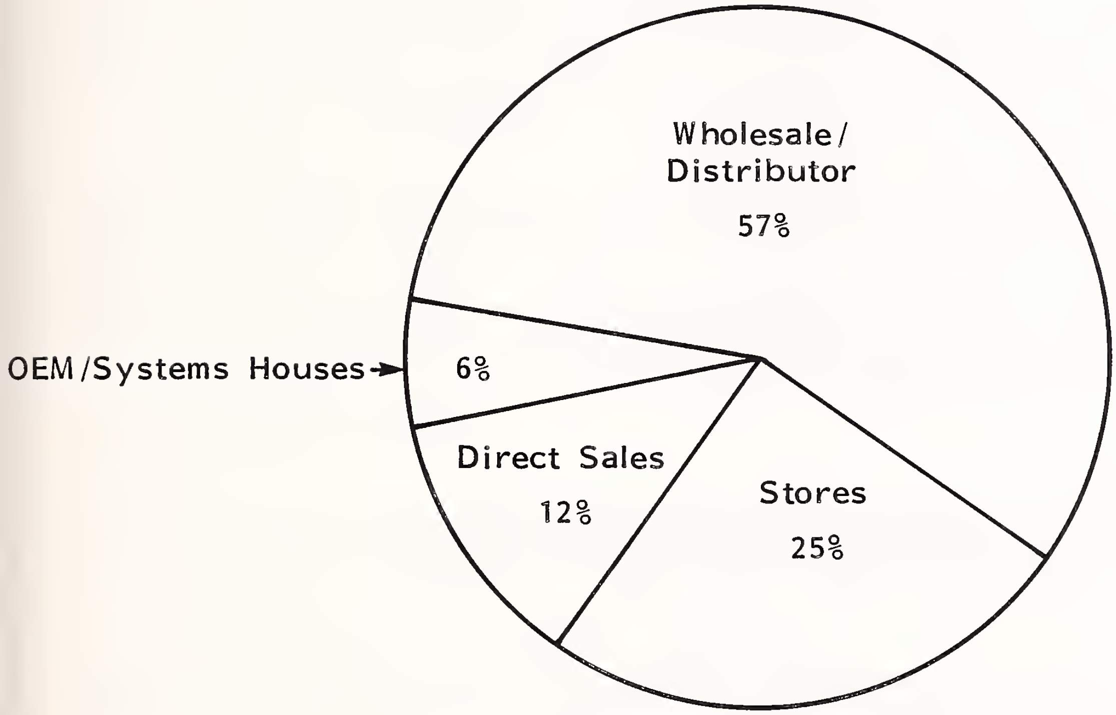
- IBM says it is dealing with the problem by purchasing its own PCs from unauthorized outlets and tracing the serial numbers back to the authorized dealers that made the unauthorized sales. Their first legal action has been undertaken recently to curtail the gray market.

C. ROLE OF THE SYSTEM INTEGRATOR

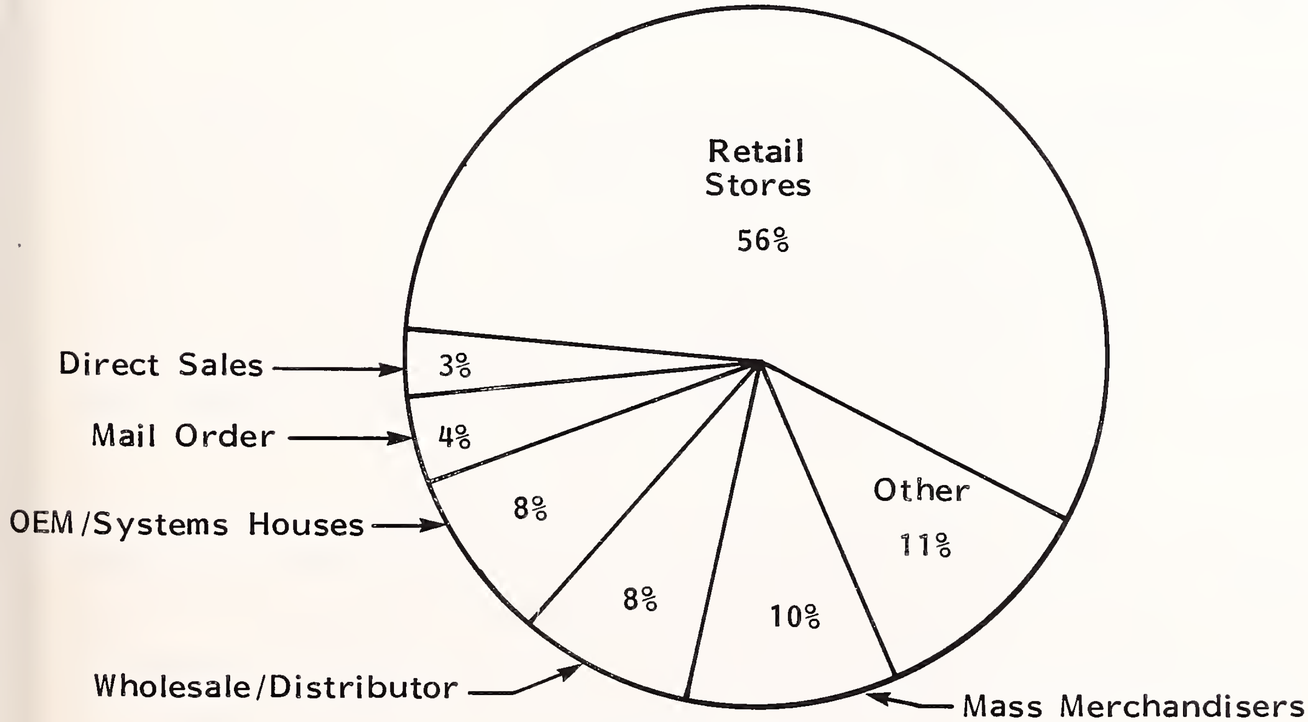
- One of the foundations of IBM's success in the PC marketplace has been its recognition of the important role of system integrators, particularly in addressing vertical markets. Its VAR programs, by which selected system integrators are given the right to resell IBM computers, represent a radical shift in sales policy by IBM. (Only a couple of years ago sales of IBM computers were the exclusive right of IBM salespeople.) The company under-

EXHIBIT VI-5

PERSONAL COMPUTER DISTRIBUTION CHANNELS



Where Manufacturers Ship



Where Users Buy

stands that system integrators will be playing an increasingly important role in PC distribution.

- The reason system integrators are becoming increasingly important is because greater vertical-industry specialization is required for vertical-market sales, and vertical markets are growing faster than other markets.

- Most system integrators would prefer to purchase all of their computer equipment, including peripherals, from a single supplier. Increasingly, this supplier is IBM. Having a complete line of computers and other equipment is no doubt a very significant aid to IBM's VAR sales.

D. FORECASTED CHANGES IN DISTRIBUTION CHANNELS

- Since the corporate market hasn't yet stabilized, distribution channels will remain in flux for at least the next two years.

- Independent stores are having trouble keeping up with chains, and some of the larger chains are buying smaller ones.

- The fundamental trends are toward more direct sales to corporations by manufacturers and more sales through VARs. Until now, most sales to corporations have been ad hoc purchases by corporate divisions behind the backs of data processing departments--usually from computer stores. Now, more and more corporations are setting standards to ensure internal consistency, limiting all purchases to one or two manufacturer's offerings; and purchases are made centrally, directly from the manufacturer.

- As specialized vertical markets become more important in the PC industry, VARs will increase their share of PC sales. These VARs represent a substantial opportunity to manufacturers who can convince them or third-party software developers to develop specialized applications for their computers.

E. PROMOTIONAL METHODS

- Apple Computer is planning to spend $100 million this year on advertising and promotion. IBM will spend $40 million on the PCjr alone. These enormous sums are designed partly to create barriers to new market entrants; it will be very hard for other vendors to spend the kind of money necessary to establish a presence at the retail level, where advertising is the most important.

- A great deal of money is being spent on television advertisements for PCs, as shown in Exhibit VI-6. Very little is spent advertising peripherals on television, however.

- The effectiveness of advertising, as perceived by microcomputer manufacturers, is depicted in Exhibit VI-7. The effectiveness of different types of trade shows is depicted in Exhibit VI-8.

- Some manufacturers are cutting back on TV ads. Kaypro spent $5 million from October to November in 1983 but then stopped; Kaypro is now concentrating on point media. ITT Toshiba targets mainly corporate systems purchasers, although it also tries to market to small businesses.

    - Toshiba's advertising budget is set as a percent of sales; right now it stands at about 6%.

    - Toshiba believes the most effective shows are Comdex and vertical market shows. It does not intend to participate in the new trade marts.

EXHIBIT VI-6

TOP PC TELEVISION ADVERTISERS FOR FIRST QUARTER, 1984

COMPANY	JANUARY TO MARCH, 1984 ($ Millions)
IBM	$10
Apple	6
Commodore	5
Coleco	4
Tandy	4
Hewlett-Packard	4

EXHIBIT VI-7

EFFECTIVENESS OF ADVERTISING IN THE MICROCOMPUTER MARKETPLACE

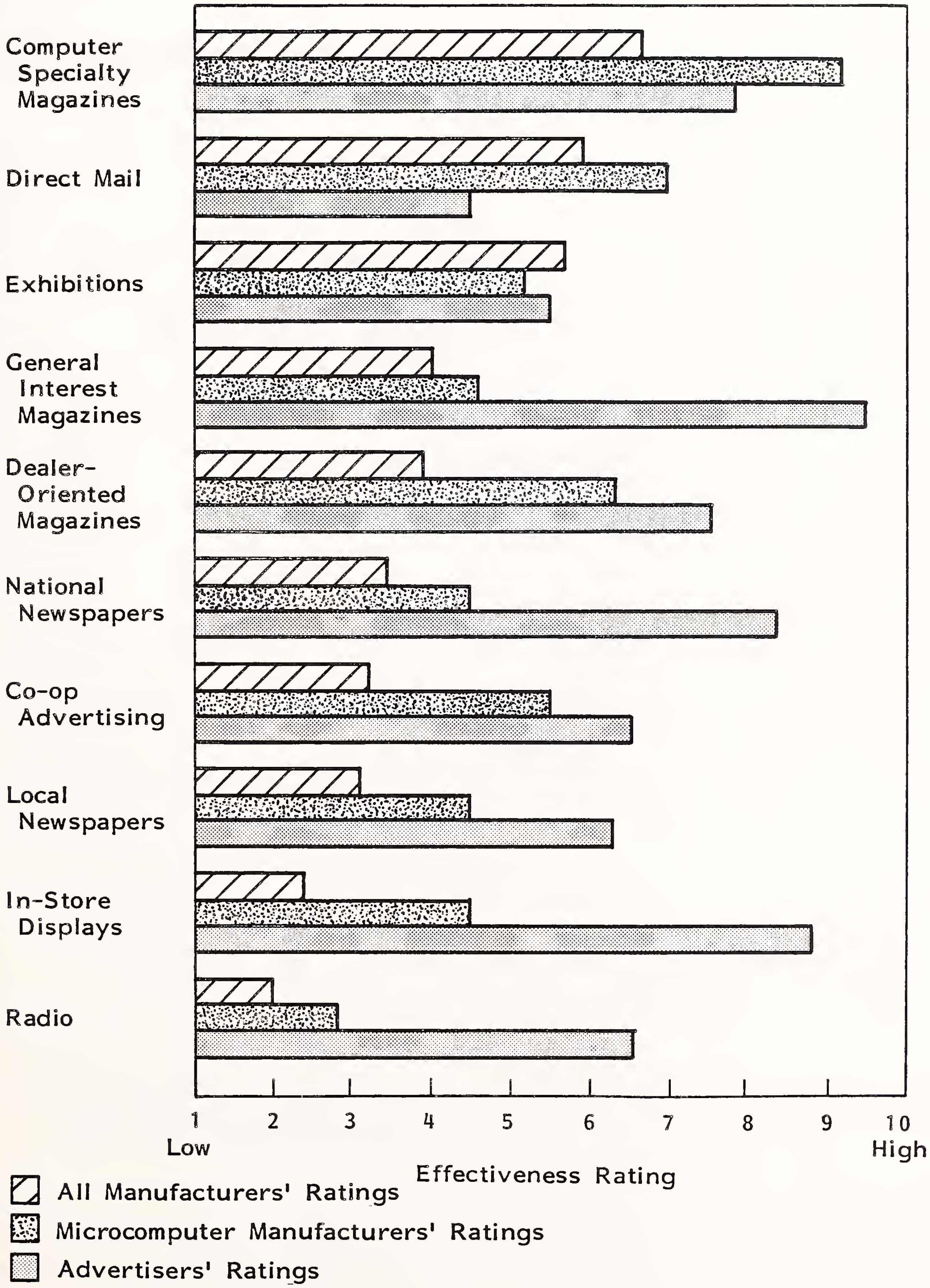
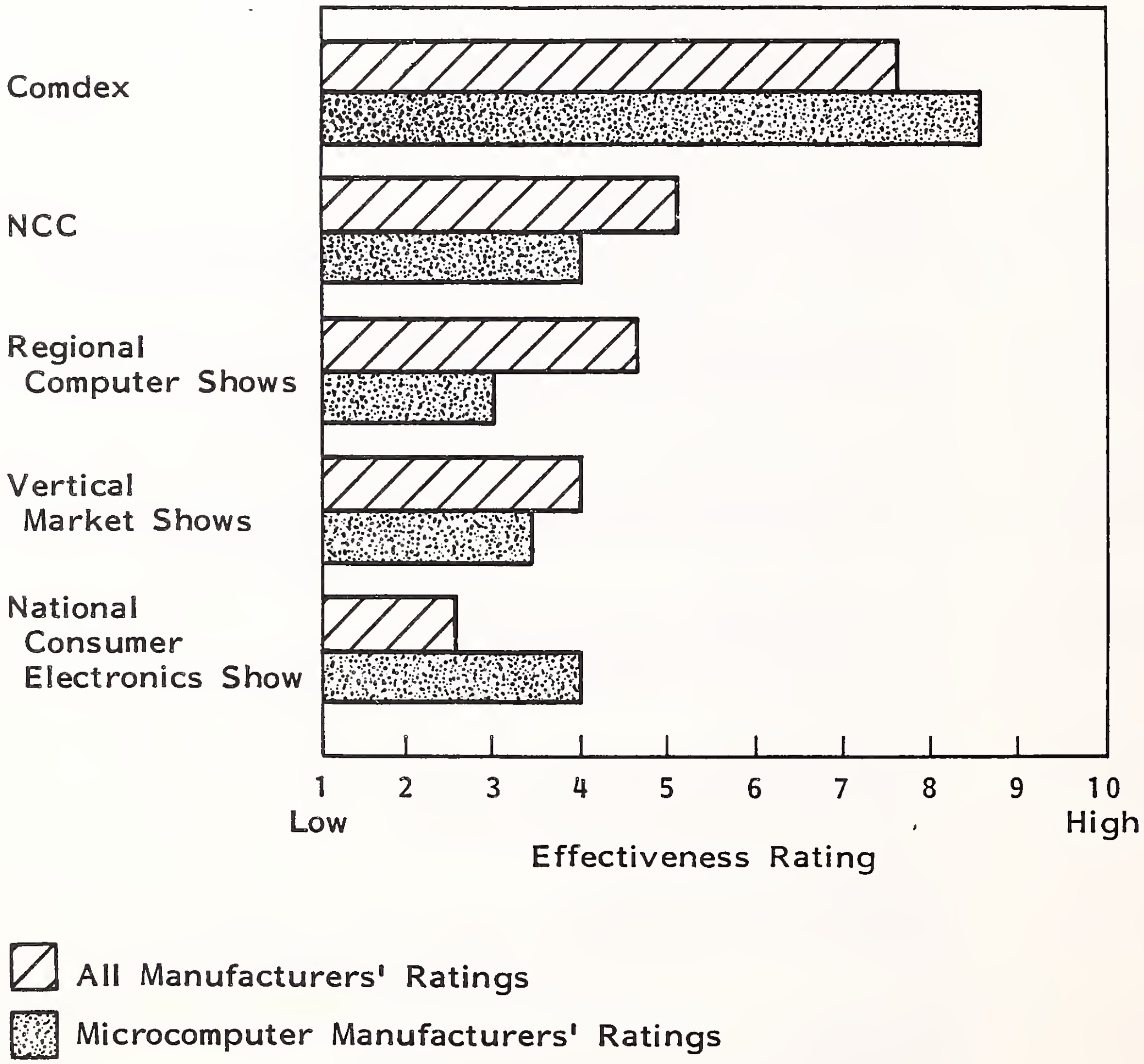


EXHIBIT VI-8

EFFECTIVENESS OF TRADE SHOWS IN PROMOTING MICROCOMPUTERS



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F. SALES METHODS OF VENDORS INTERVIEWED

1. TANDY/RADIO SHACK

- All of Tandy's computer sales are through its retail stores.

- Tandy targets corporate systems purchasers, system integrators, neophyte computer purchasers, and replacement or add-on buyers.

- The advertising budget is set as a percent of sales but is not publicly available.

- Tandy is bullish on Comdex and also likes NCC. It intends to participate in the Dallas Infomart, partly because it believes the trade shows have gotten out of hand and a more permanent site is needed.

2. STRIDE MICRO

- Stride has an eclectic distribution system. In the U.S., it sells direct to dealers, OEMs, and some large end users such as the military and educational establishments; abroad, it uses distributors exclusively.

- Stride anticipates increasing sales to VARs, who now make 40% of its sales; this is due to the increasing sophistication of computer products.

- In its advertising, Stride targets primarily software developers and system integrators, though it also targets some corporate systems purchasers. Its advertising budget is less than 8% of sales and is set by the objective and task method.

- The only show for which Stride has any respect is NCC. It does not intend to participate in the trade marts.

- Stride is most pleased with computer-oriented media and exhibitions as advertising media.

3. TARBELL ELECTRONICS

- Tarbell is a rather specialized operation; it is not high volume and often takes on special orders.

- Seventy-five percent of its sales are to system integrators, and 25% are to computer stores that often do some integration on their own.

- Tarbell rates both Comdex and NCC high but does not plan on participating in the trade marts.

- Advertising is about 5% of Tarbell's sales and is split between system integrators and computer specialty store orientations.

4. ONYX SYSTEMS

- Forty percent of Onyx's sales are through one distributor, Arrow; the rest are through OEMs. On the way to final sales, many of the computers pass through system integrators and computer stores.

- Onyx exclusively targets its advertising to system integrators. Its systems are largely multiuser, which tend to be a more complicated sale unsuited to retail channels. The advertising budget is about 2% of sales.

- Onyx only attends Comdex and NCC. It hasn't even looked into the possibility of opening a booth in a trade mart.

- Advertising is done in-house by four people.

VII ANALYSIS OF THE PRINTER MARKET

VII ANALYSIS OF THE PRINTER MARKET

A. MARKET GROWTH AND DEVELOPMENT

- The market for small-system printers has heretofore closely paralleled the market for microcomputers. But the expansion of computer networking will have a dampening effect on printer sales.

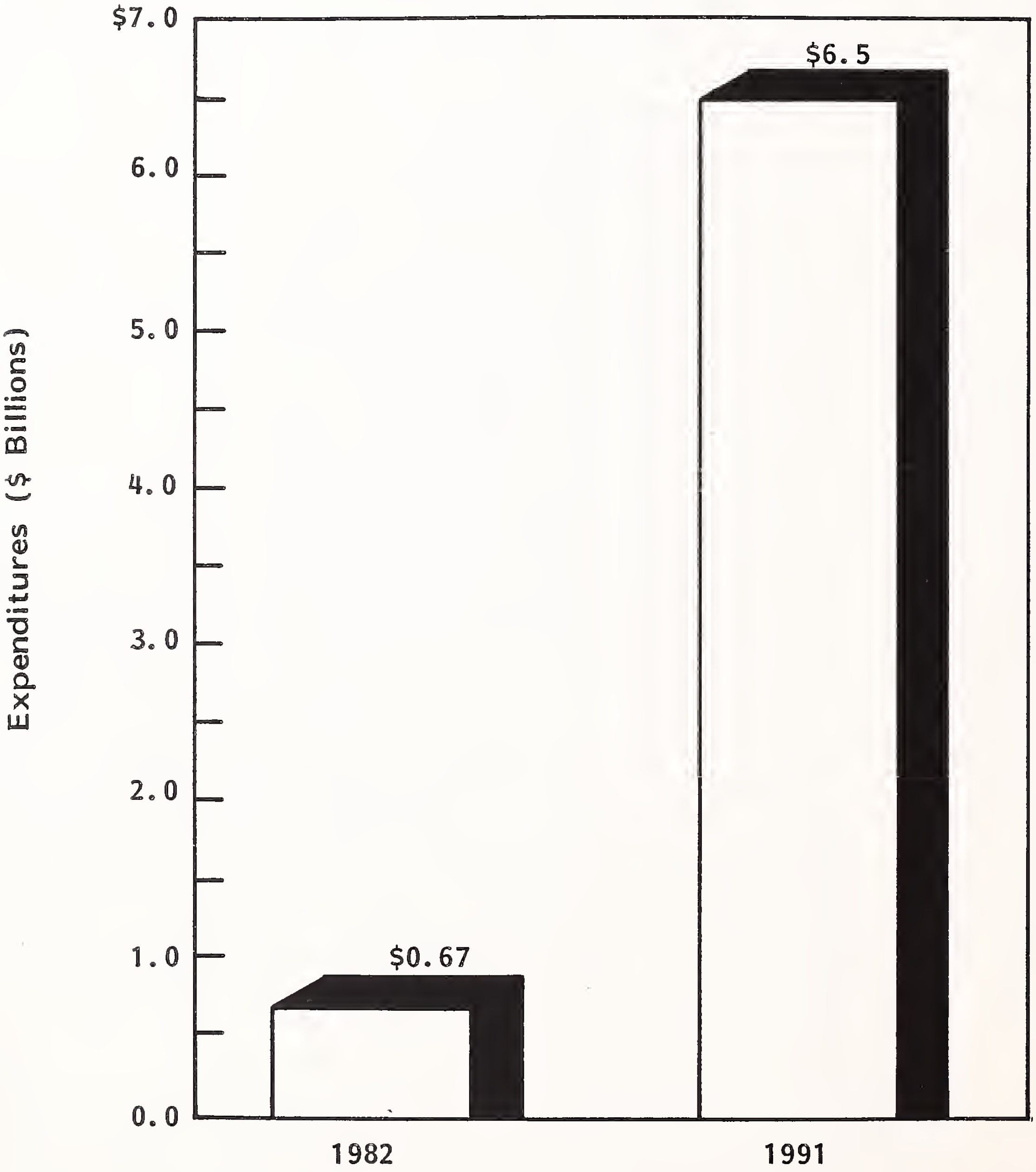
- In 1982, printers accounted for about 18% of the $3.7 billion spent in the U.S. on microcomputer-based business systems, or about $670 million. Estimated 1991 sales are $6.5 billion, which will represent an average annual growth of about 29%. See Exhibit VII-1.

- Demand for serially interfaced printers has increased sharply as a result of price cuts. Dot-matrix printers will continue to dominate the marketplace, but the graphics-reproduction capabilities of thermal-based nonimpact printers will be the strongest growing segment of the printer marketplace. Growth in this segment will be buttressed by continuing technological improvements that will outstrip the gains of more mature segments.

- Technological improvements will be more important than the price differentials already evident between sophisticated nonimpact printers and their dot-matrix and daisy-wheel counterparts. Low-cost thermal-transfer printers will be relegated largely to noncommercial applications.

EXHIBIT VII-1

U.S. SPENDING ON PRINTERS FOR
MICROCOMPUTER-BASED BUSINESS SYSTEMS



Average Annual Growth Rate = 29%

- In the last three years, printer prices have been cut in half; this year, prices have been slashed 10-15% Prices are expected to continue to drop for a variety of reasons.

- Reduced manufacturing costs are one important reason prices are dropping.

  - Wholesale prices are declining as low-cost manufacturing operations (chiefly located offshore) ramp up production levels and capture cost benefits from economies of scale.

  - Although the potential for sharp price reductions on the scale of microcomputers does not exist (because of the high cost component of electromechanical parts in printers), technological improvements will enable some reductions. The development of very low cost daisy wheels is one example.

  - Laser technology is another example of how technology can lower prices; laser printers of high quality are expected soon at very competitive prices.

- More important than decreased manufacturing costs, however, is increased competition. This competition has grown especially strong in the lower-end small business and home user markets, because this is where the market is seen expanding the most.

B. DISTRIBUTION CHANNELS

- Printers for office systems are sold largely through retailers. It is very much an add-on market; a large proportion of sales are made some time after the purchaser has already acquired a computer system.

- Small businesses and corporate users make almost half the purchases of printers in retail stores, as Exhibit VII-2 shows. However, demand for printers destined for home use will increase faster, due to the faster growth of consumer personal computer purchases.

- At the low end, vendors are searching for a combination of distribution channels, price points, and features that will catch the attention of a vast computer audience that is still not certain what it wants.

  - A reason for the multiplicity of approaches is the large number of segments emerging among microcomputer-related printer purchasers. Accordingly, manufacturers are implementing a number of strategies aimed at professionals, small businesses, schools, consumers, and large corporations.

  - Even within these market segments, subsegments are developing. In the home market, for example, a market for a new product with absolutely minimal features and a very low price is apparently developing.

- General business applications are the most common type of application using printers purchased from retail stores, as shown in Exhibit VII-3.

- The retail respondents cited two vendor policies as important.

  - Diablo was cited for its speedy return policies and its local distribution centers.

  - Qume is admired by retailers for its wide variety of products, its product reliability, its good prices, and especially its separate returns department.

EXHIBIT VII-2

ORIENTATION OF RETAIL PRINTER PURCHASERS

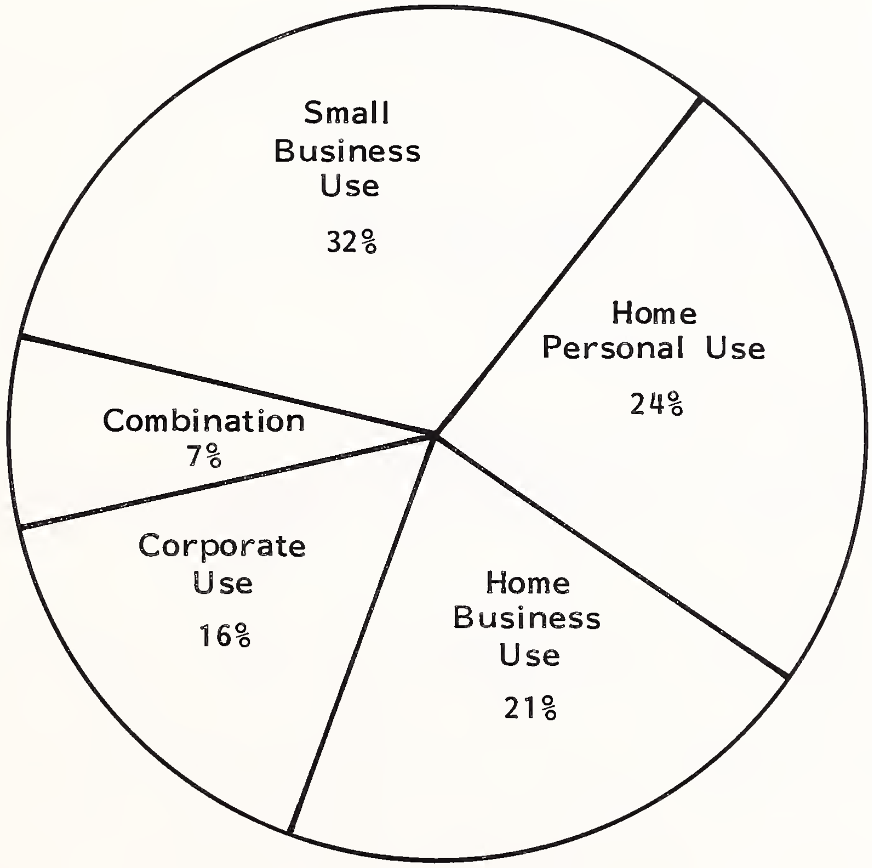
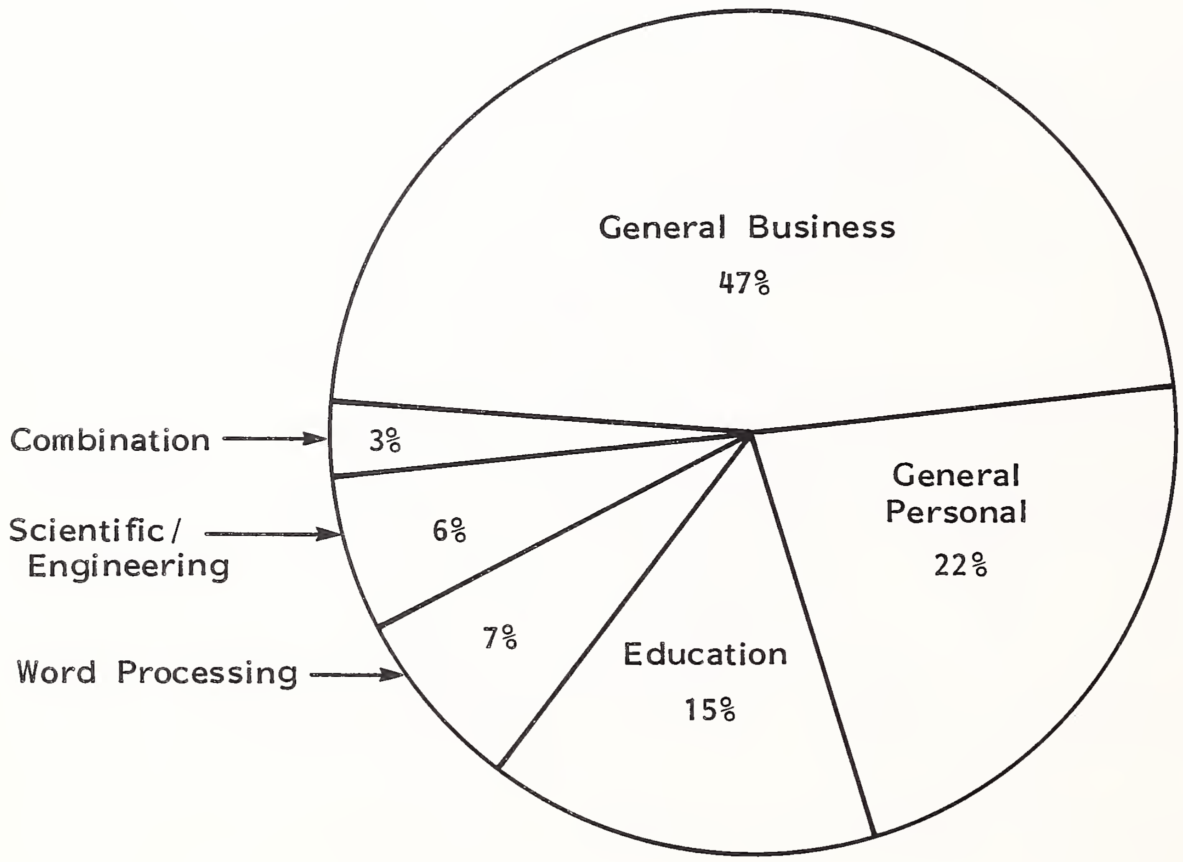


EXHIBIT VII-3

PRIMARY APPLICATIONS OF PRINTERS SOLD IN RETAIL OUTLETS



C. ROLE OF THE SYSTEM INTEGRATOR

- As in most other peripherals, system integrators prefer to purchase their printers from their computer supplier. This has not always been possible, because computer manufacturers often did not offer full lines. Now, however, they typically do.

- Still, the resistance of system integrators to purchasing printers not supplied by their computer vendors is apparently not as high as for other peripherals.

- Just as in other peripherals markets, system integrators can be expected to increase their share of sales as their share of the total computer systems marketplace increases.

D. FORECASTED CHANGES IN THE DISTRIBUTION CHANNELS

- Retailers expect the number of printer vendors to decline as existing vendors expand their lines and as dealers seek to reduce their sources; they prefer one source because of the greater ease of providing technical support. Apple and IBM have been introducing new products and now carry entire lines with good warranties and effective technical support. One retailer specifically cited this as a bad trend for Epson.

- Smaller distributors will probably be squeezed out of this market because they cannot provide the service that retailers desire, and they will not be able to cope with increasing pricing pressures.

- Distribution will become more regionalized and more end-user oriented. The market will also grow increasingly congested.

E. PROMOTIONAL METHODS

- Being an add-on market, sales of printers are considerably more detached from actual computer systems sales than the other peripherals examined here. There is substantially greater opportunity, as a result, to increase sales by differentiating products in the minds of consumers.

- Qume is considered an excellent advertiser by several advertising agencies. It is cited for the clearness and consistency of its messages; it normally concentrates on sending just one message per ad.

- Epson is cited for its professionalism and consistency. Fujitsu has a well-integrated campaign that addresses end users, OEMs, and dealers in a coordinated PR and advertising effort.

- That printer manufacturers (and advertisers) see advertising and promotion as being more effective in the printer market than in other peripheral markets is evident in Exhibit VII-4 and VII-5. Especially high is the rating given to in-store displays by advertising agencies--as opposed to the low rating by manufacturers. This suggests a possible neglected opportunity.

F. SALES METHODS OF VENDORS INTERVIEWED

1. MEMOREX CORPORATION

- Memorex distributes printers exclusively through independent sales organizations (distributors).

- Memorex targets its advertising to system integrators and the IBM aftermarket.

EXHIBIT VII-4

EFFECTIVENESS OF ADVERTISING IN THE PRINTER MARKETPLACE

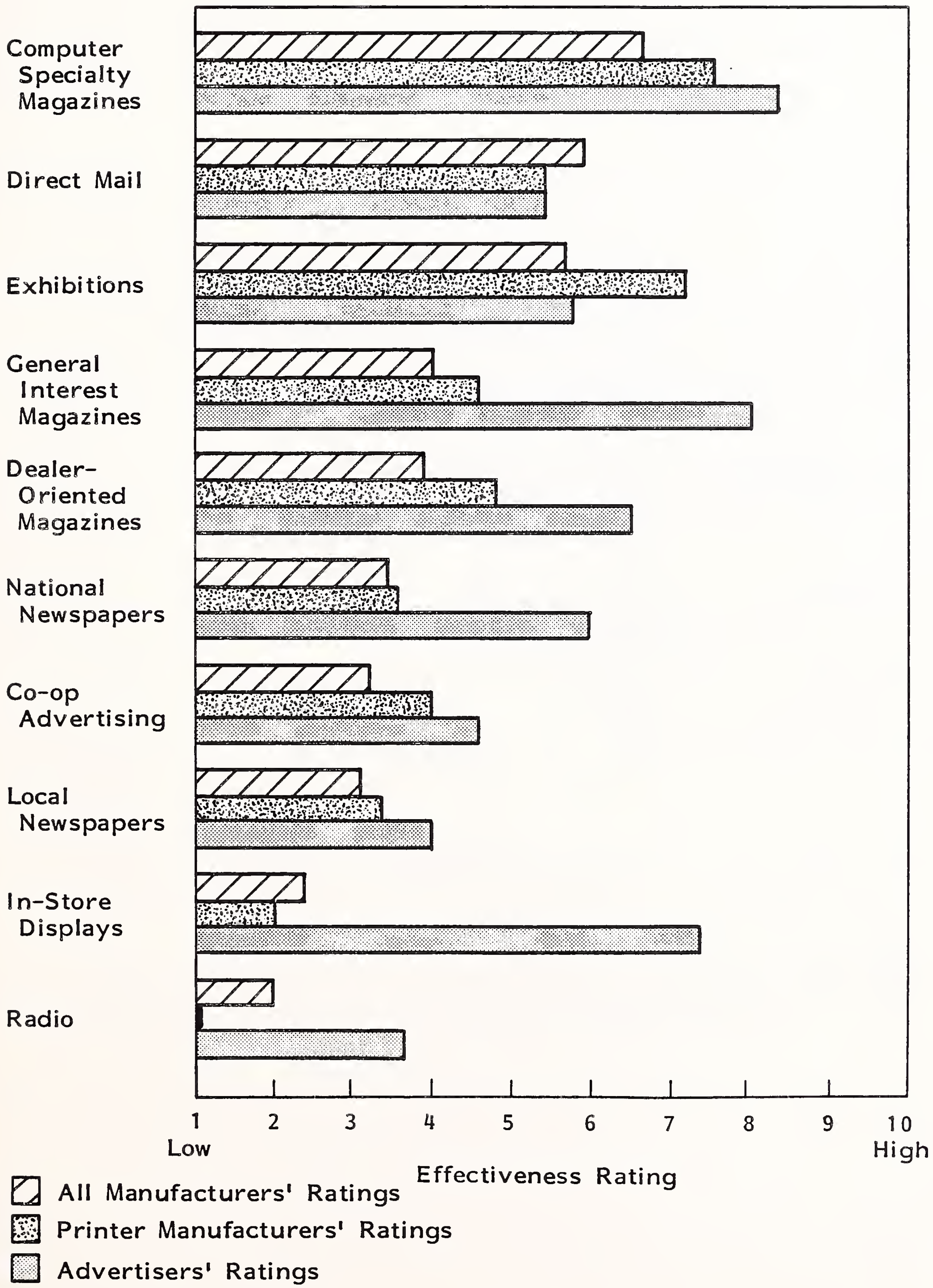
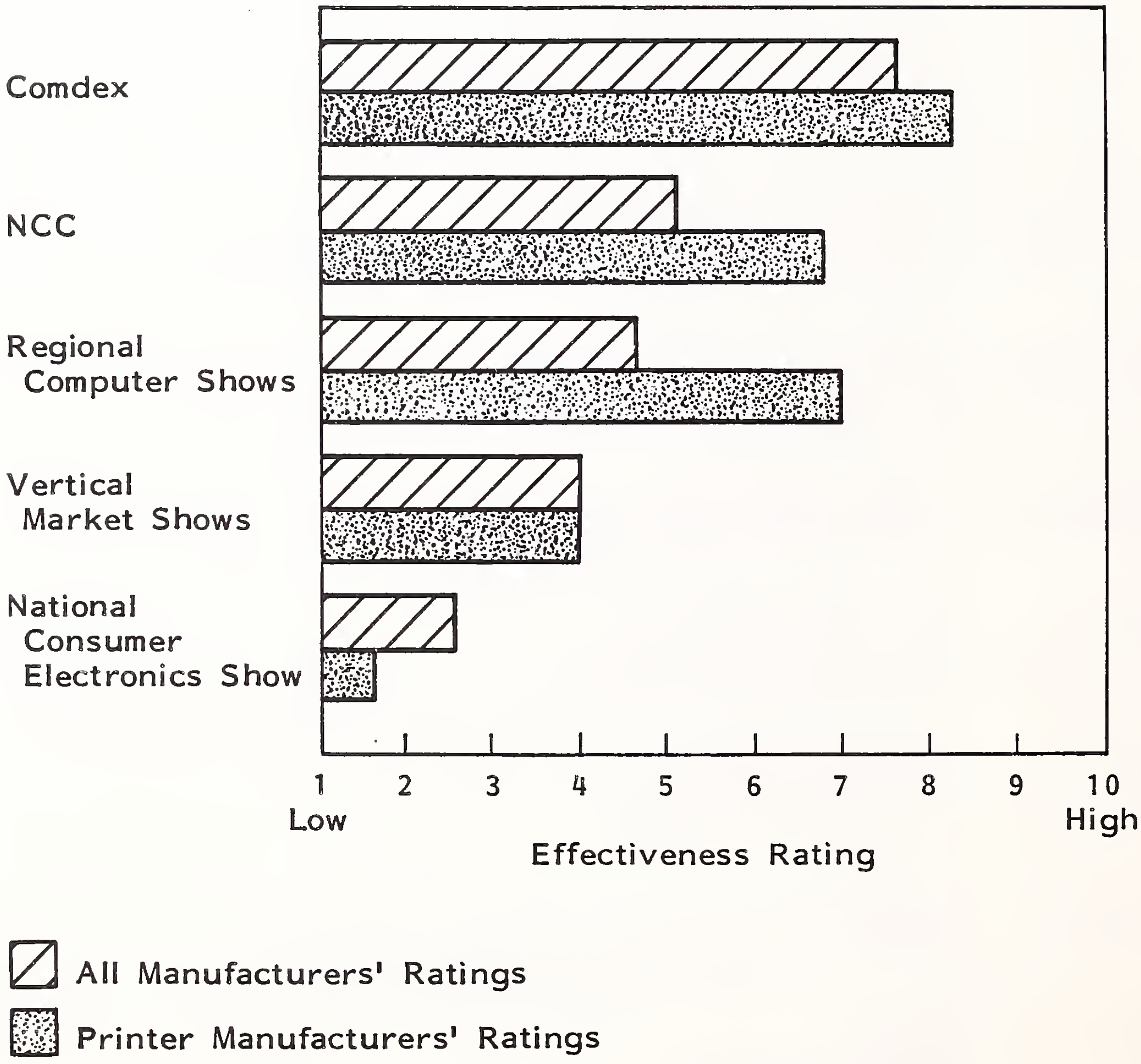


EXHIBIT VII-5

EFFECTIVENESS OF TRADE SHOWS IN PROMOTING PRINTERS



- Memorex attends NCC, Comdex, regional, and vertical trade shows.

- Memorex's printer advertising budget is about $700,000 (printer sales are about $30 million).

2. C. ITOH ELECTRONICS

- C. Itoh is largely an OEM printer supplier. It is a major source for Apple and Data General.

- C. Itoh attends Comdex, regional OEM-oriented computer shows, and NCC. It targets the OEM market and does not, therefore, intend to establish a presence in the trade marts (which are more end-user oriented).

- The company's advertising budget is set by fiat from the president.

3. PHILLIPS PERIPHERALS, INC.

- Eighty percent of Phillips's sales are to OEMs, through manufacturer's representatives. The rest of its sales are through distributors.

- Phillips's advertising budget is set by fiat in Germany. It is targeted 98% to OEMs.

- Phillips attends NCC, Comdex, and regional shows. It does not plan to participate in trade marts, although its representatives and distributors might.

- Phillips's advertisements are placed largely in electronics trade magazines like Electronic News, which are read by OEM decision makers.

4. SIEMENS SYSTEMS, INC.

- Siemens, like Phillips, is a subsidiary of a European (German) firm.

- Over 50% of Siemens's sales are to OEMs. It is now beginning to penetrate computer specialty stores, however.

- Siemens targets distributors, OEMs, dealers, and end users. It attends Comdex and vertical market shows; it finds the vertical market shows particularly effective.

- Siemens intends to attend the trade mart in Dallas. It anticipates a great deal of traffic there.

- Siemens's advertising is done in-house, and it has no PR firm.

VIII ANALYSIS OF THE FLOPPY DISK DRIVE MARKET

VIII ANALYSIS OF THE FLOPPY DISK DRIVE MARKET

A. MARKET GROWTH AND DEVELOPMENT

- North American sales of disk drives used with personal computers will increase from slightly more than $1.5 billion in 1983 to $3 billion in 1985, as shown in Exhibit VIII-1. The floppy disk portion of this marketplace will grow from $1.1 billion to $2.1 billion.

- Sales of full-sized floppy disk drives will not increase nearly as much as half-sized floppies and rigid disk drives. By 1987, the marketplace will be dominated by half-height floppy disk drives, as Exhibit VIII-2 depicts. At the moment, the market is production constrained; there is considerably more demand for product (especially fixed disks) than can be effectively delivered. Some OEMs—such as Kaypro—are complaining about the quality of the products they receive, but they also complain that they have missed considerable sales opportunities because of the inability of drive manufacturers to keep up with demand.

- At the same time, increased competition (much of it from Japan) and the commodity nature of disk drives have caused prices to drop and are forcing down margins. Prices for floppy disk drives dropped about $100 in 1983.

- There are now over 90 floppy disk manufacturers; a shakeout of these is expected in the near future.

EXHIBIT VIII-1

U.S. DISK DRIVE SHIPMENTS

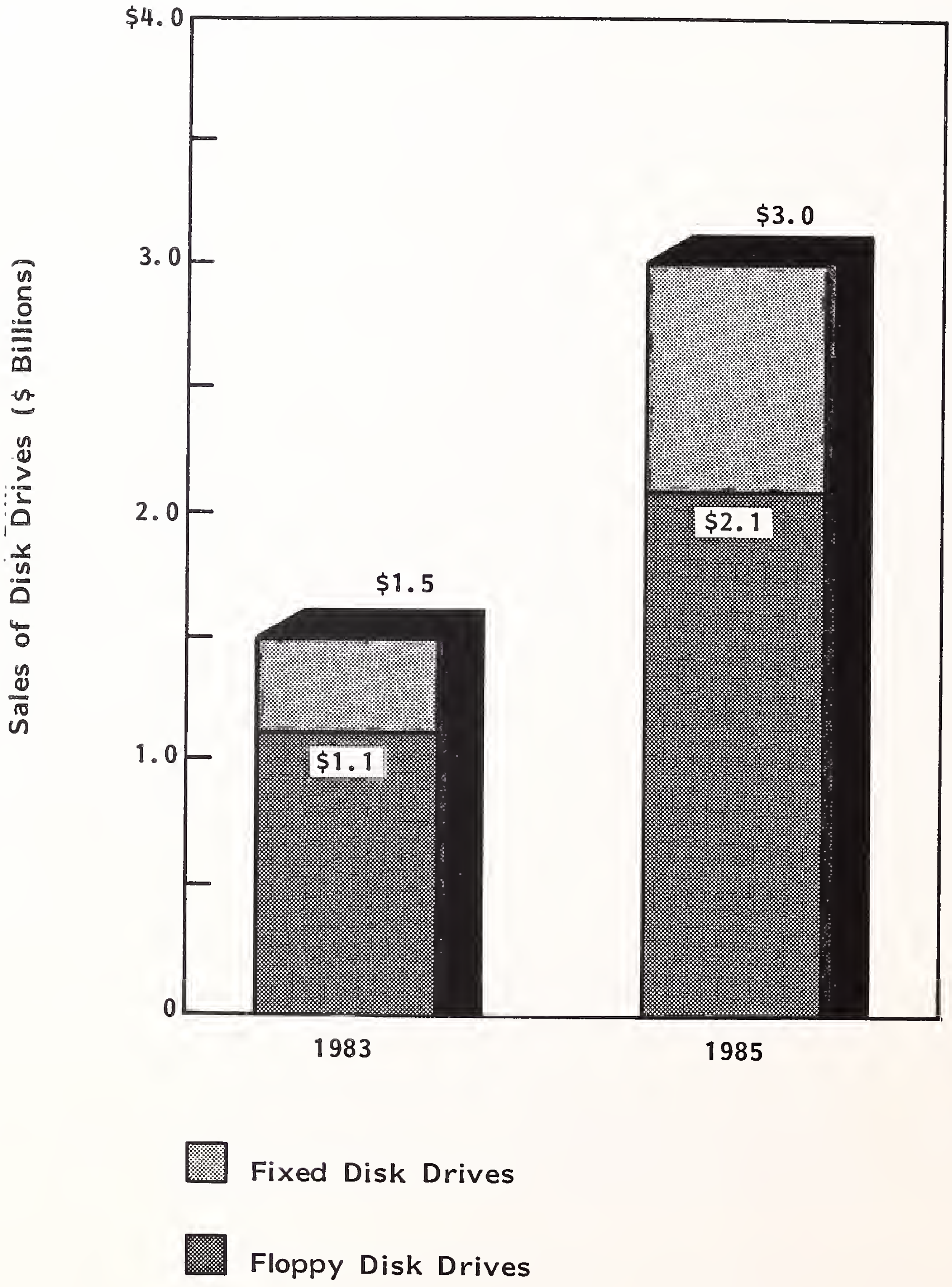
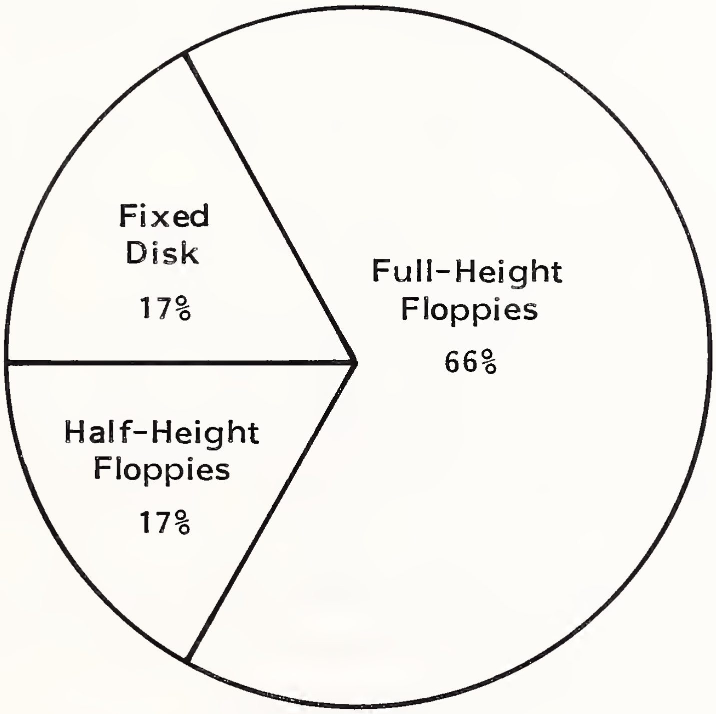
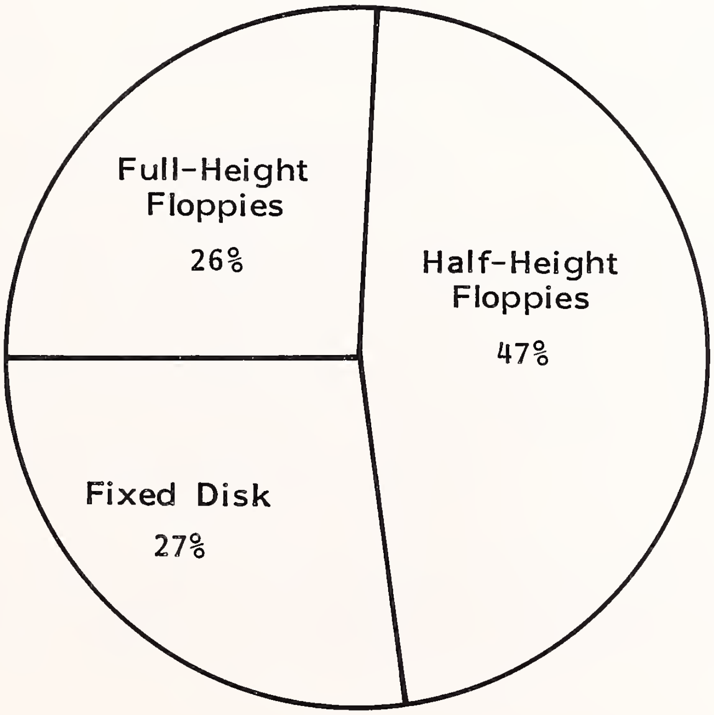


EXHIBIT VIII-2

BREAKDOWN OF DISK DRIVE SHIPMENTS



1983
(Units Shipped)



1987
(Units Shipped)

- Contributing to lower costs is high-volume automated production and off-shore production. Japanese manufacturers are expected to perform particularly well in this marketplace because of its commodity characteristics.

- Technological change, which is not as important in this industry as in some other peripherals, is still highly influential. The technical change is two-pronged: toward smaller drives and toward larger capacities.

  - Worldwide shipments of microfloppy drives will be 840,000 units in 1984, increasing to 2.04 million units in 1986. The 3-1/2-inch microfloppy has a definite lead in acceptance and is likely to emerge as the de facto standard for microfloppies unless IBM chooses another size.

  - One important contributor to the acceptance of microfloppies is the growth of portable-computer sales. Portables need smaller disk drives than the traditional 5-1/4-inch variety.

  - HP has said it will introduce a new microfloppy late this year with more than 600 KB of formatted capacity.

  - By 1988, disk makers expect capacities of 4 to 6 M-bytes to be available on microfloppies.

- Forty percent of all floppy disk drive shipments are going to the personal computer marketplace; the rest are associated with industrial microcomputers.

B. DISTRIBUTION CHANNELS

- The floppy disk drive market is overwhelmingly OEM driven. The suppliers market directly to IBM, Apple, and other major office-computer system vendors who resell them either bundled into their systems or as add-on products.

- A few of the independent floppy drive manufacturers do have some retail distribution. The most popular are Control Data and Tandon.

- Apple is the leading disk drive brand in floppy disk drives at the retail level, although its position is weakening. Commodore used to be second, but in the most recent surveys it has dropped to fourth place behind Control Data and Tandon and Teac. Exhibit VIII-3 presents data ranking manufacturers' disk drive sales.

- Disk drives typically account for about 5% of retailer's sales; add-on drives, where the opportunity for independent suppliers exists, represent only a small portion of this. The portion will grow as individuals expand their systems and enlarge their memory capacities in order to run new software.

C. ROLE OF THE SYSTEM INTEGRATOR

- System integrators overwhelmingly rely on their computer suppliers for floppy disk drives. They seem very satisfied with this arrangement and, if anything, intend to increase this reliance. The opportunity for independent distribution of floppies through them is quite dismal.

- To the extent that system integrators are increasing their share of the market for computer systems, their reliance on computer vendors will shrink the

EXHIBIT VIII-3

DEALERS' BEST-SELLING DISK DRIVES

MANUFACTURER	PERCENT TOTAL STORES RANKING MFR. AS FIRST	PERCENT INDEPENDENT STORES RANKING MFR. AS FIRST	PERCENT CHAIN STORES RANKING MFR. AS FIRST
Apple	20%	11%	31%
Commodore	4	4	5
Control Data	6	8	5
Mitsubishi	3	6	-
Rana	1	2	-
Tallgrass	2	4	-
Tandon	5	4	7
Teac	5	8	2

potential market for independents. The add-on market for floppies is quite small since disk drive sales are normally made at the time of purchase of the full computer system.

D. FORECASTED CHANGES IN DISTRIBUTION CHANNELS

- Vendors interviewed are unanimous in their forecast of no change in floppy disk drive distribution channels over the next few years. They say that 95% of the market is now tied up with sales of computer systems (leaving 5% for add-ons). They do not anticipate that this will change significantly.

- If anything, the dominance of the computer manufacturers in drive distribution can be expected to increase as the top computer vendors increase their share of the computer systems marketplace. Some computer vendors such as Kaypro are already complaining that they are getting poor treatment from floppy disk drive manufacturers, which are concentrating their energies on serving IBM and Apple. Kaypro says it is receiving drives from Tandon with "IBM" and "reject" stamped on them.

- Japanese manufacturers are expected to capture a large share of the OEM disk drive business. Entry into the business--at least in terms of distribution--is relatively simple, since there are very few purchasers.

E. PROMOTIONAL METHODS

- Relatively little promotion is done in the floppy disk drive marketplace. As noted above, there is very little after-market; drives are normally purchased with a complete system and are normally the same brand as the computer being purchased.

- Exhibit VIII-4 and VIII-5 show that disk drive manufacturers rate the effectiveness of advertising and trade show attendance quite low.

- Several advertising agencies cite Fujitsu as a superb disk drive advertiser. Their ads tell a story; they relate a problem and create awareness. Their ads pique interest--a very important characteristic. They are also precise.

F. SALES METHODS OF VENDORS INTERVIEWED

1. TANDON

- Ninety percent of Tandon's sales are made by its direct sales force to OEMs. Ten percent are through industrial distributors, but these are only for international sales.

- Tandon's promotion reflects the high-level computer-industry characteristics of its customers--the OEMs and large-computer-system-sophisticated corporate clients. Ads are run in trade magazines such as Computer System News and Electronic News, not in end-user publications like Infoworld.

- The only trade shows Tandon attends are Comdex and NCC. Tandon does not plan to participate in the trade marts, because they are largely directed at end users.

- Advertising is only about 0.5% of Tandon's sales. Tandon says it uses the objective-and-task method for calculating its ad budget.

EXHIBIT VIII-4

EFFECTIVENESS OF ADVERTISING IN THE DISK DRIVE MARKETPLACE

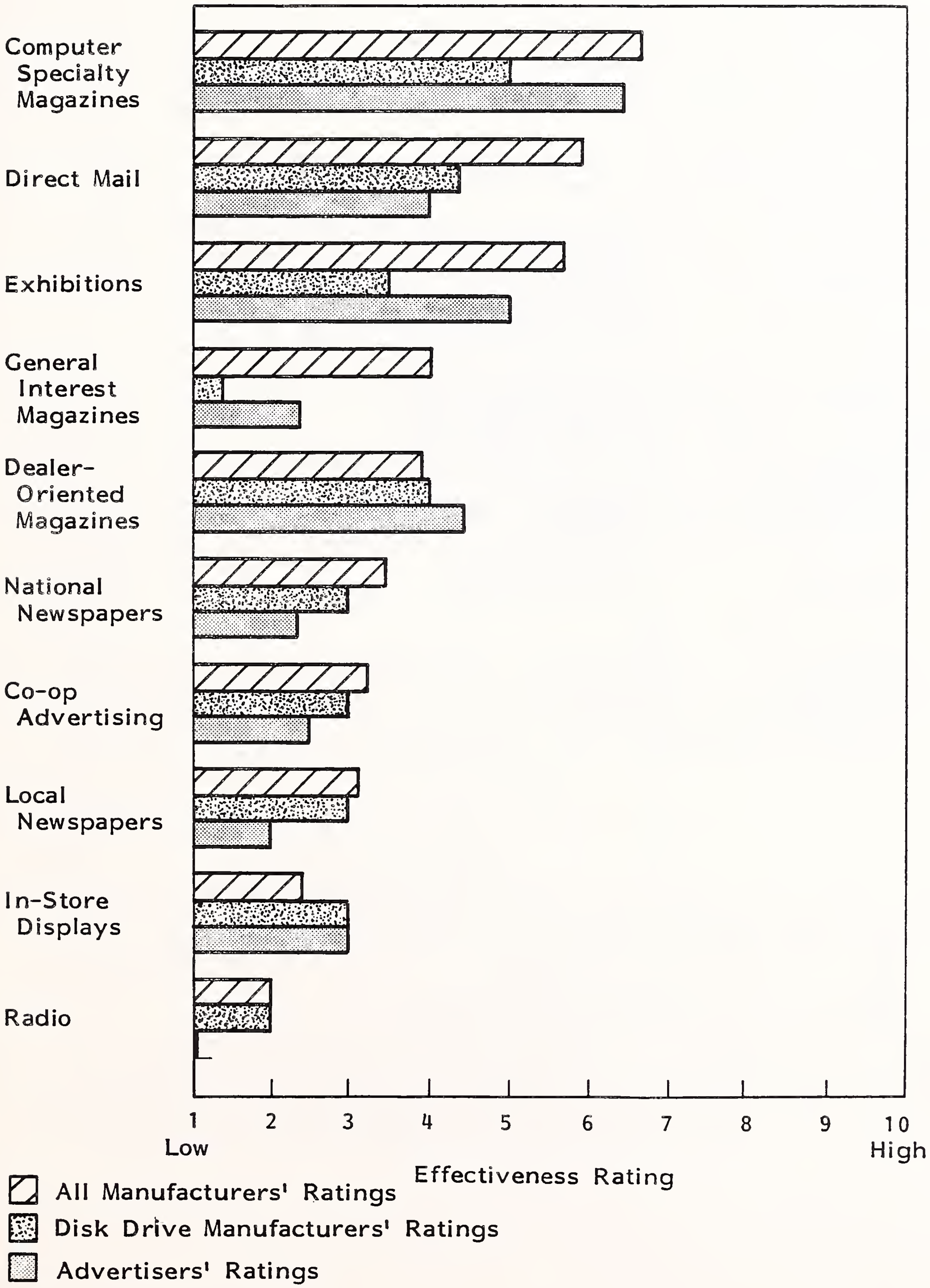
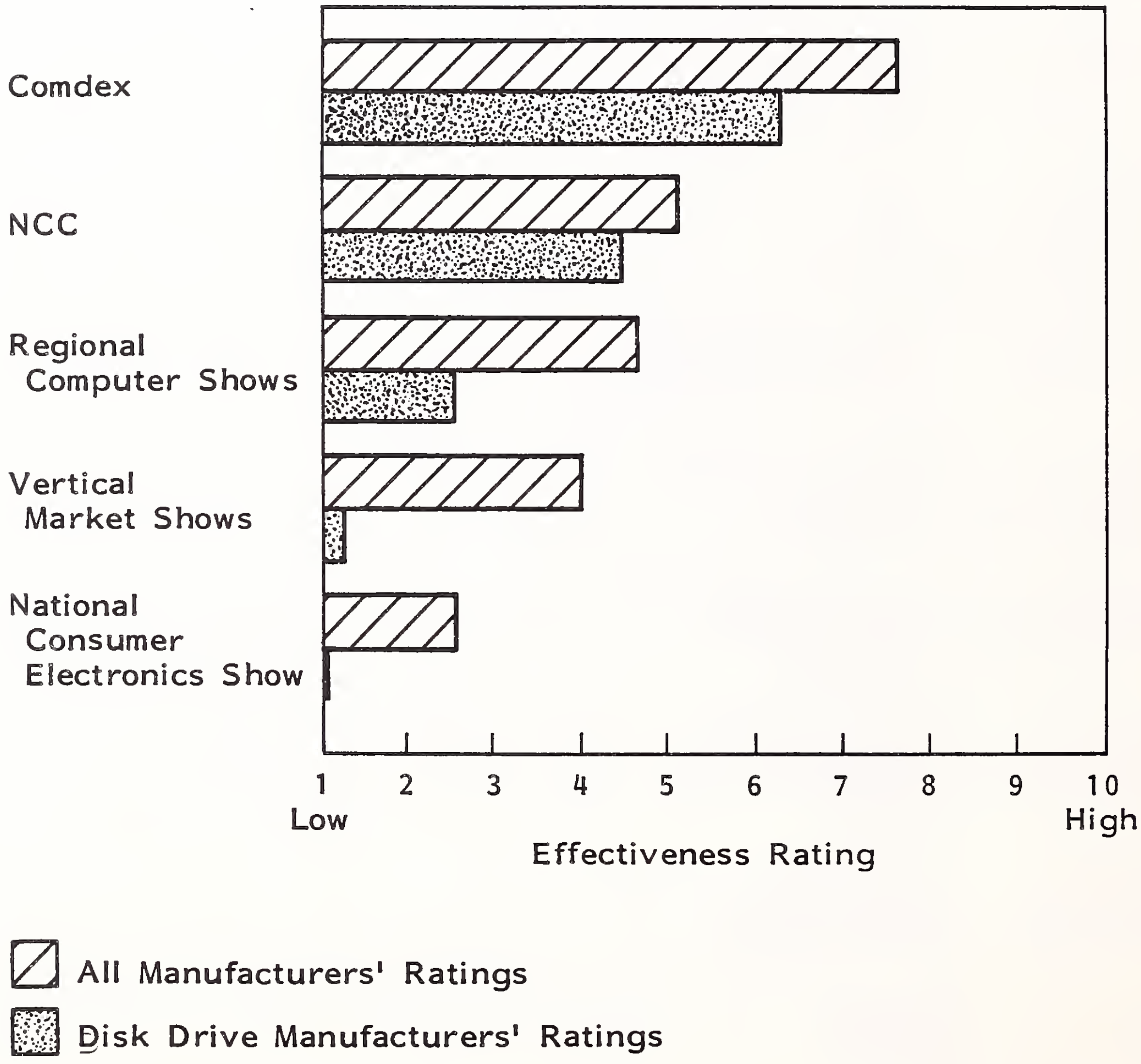


EXHIBIT VIII-5

EFFECTIVENESS OF TRADE SHOWS IN PROMOTING DISK DRIVES



2. CORVUS SYSTEMS

- Seventy percent of Corvus's sales are made through regional distributors, and 20% are made directly to OEMs. The remaining 10% are sold to franchise chains.

- Corvus attends substantially more trade shows than most other drive manufacturers interviewed. This is because it is the only exclusively rigid drive manufacturer interviewed and Corvus sells mainly to end users; that is, Corvus drives are rarely bundled into systems and must be purchased separately by end users in the after-market. Still, Corvus has no plans to establish a presence in the new trade marts.

- Corvus's advertisements reflect its greater closeness to end users. Ads usually run in end-user-oriented personal computer magazines like PC World. Corvus's advertising budget is relatively high for a drive manufacturer: about 2% of sales. Corvus admits it does not use the objective-and-task method of establishing its ad budget; instead, it pegs the ad budget as a fixed percent of sales.

- Corvus's targets for its advertising are a bit eclectic: educators (Corvus's local area network is popular in schools), enthusiasts, replacement and add-on business buyers, dealers and distributors, and DP department chairpeople.

3. QUME

- Qume's sales are overwhelmingly to OEMs. Only 5% are sold through industrial distributors. Seventy percent of its sales are to IBM, Apple, Tandy, and Commodore.

- As a result, Qume does very little advertising. It attends only two shows—Comdex and NCC and will not participate in the trade marts. Its promotion is largely geared toward building up good customer relations.

4. HEWLETT-PACKARD

- One hundred percent of HP's disk drive sales are through manufacturer's representatives.

- Of course, they are normally bundled into HP's computer systems.

- As a result, they are not advertised separately from HP computers.

IX CORPORATE IMAGE DEVELOPMENT AND PROMOTION

IX CORPORATE IMAGE DEVELOPMENT AND PROMOTION

A. OVERVIEW

1. THE GENERIC STRATEGIES

- The need for corporate image development is very dependent on corporate marketing strategy. Four generic strategies are applicable to Oki.

a. Commodity/OEM Strategy

- Oki could emphasize low price, low overhead and two-tiered distribution. Sales could also be made to OEMs. Dealers and distributors would be responsible for most support, including software and systems integration.

- End-user advertising is still necessary for some products, in order to establish credibility with end users. But if peripherals are bundled with other manufacturers' products, corporate image development and pull-through advertising would not be important.

b. Vertical Market Strategy

- Systems and sales could be designed around specific vertical markets. These systems could be sold through a direct sales force or through system integrators, who will often do the software development.

- Seiko is going this route with its business computers; it is actively recruiting vertical-market software developers through computer trade magazines to develop applications for its products. Exhibit IX-1 is a reproduction of one of Seiko's advertisements for this program.

- In this case, Oki corporate image development is very important because it must convince system integrators to commit themselves to support products of a vendor currently recognized as a major player only in the printer market.

c. Complete System Strategy

- This strategy would require an enormous commitment on the part of Oki. It would involve providing complete integrated systems to be sold in retail stores and/or to system integrators. The vendor must provide packaged solutions and user-friendly interfaces.

- In order to convince users, retailers, or system integrators that the vendor is "serious" and will be around for the long haul, extremely large outlays would have to be made on advertising and promotion. Vendors that have committed to this strategy on the retail level, such as Apple and IBM, have raised the barriers to other vendors' entry by their heavy spending on advertising and their innovative marketing tactics. This strategy would be much less costly to implement the system integrator level.

d. Differentiated Product Strategy

- It is still possible to enter many of the markets covered here with new, innovative products or products specially designed for specific applications. Examples include full-screen "lap" portable computers and 3.5-inch disk drives. Distribution could be either two-tiered or through OEMs. System integrators would be the preferred outlet.

EXHIBIT IX-1

VERTICAL MARKETING BY SEIKO

"Build your business with Seiko"

Vertical Market Selling Opportunity

Dealers, this is your opportunity to capitalize on a comprehensive vertical market program that includes aggressive industry-specific advertising, extensive dealer support, product-price integrity and a name synononomous with technology, market staying power and brand name recognition—Seiko.

Seiko business computers is seeking applications from qualified dealers to become a "Certified Vertical Market Specialist" in the following markets:

- Retail Jewelery Management System
- Nursing Home Management System
- Veterinary Management System

with additional markets to be added regularly.

For more information contact: Ms. Lisa Adair, Seiko business computers, 1305 W. Belt Line Rd., Suite 319, Carrollton, Texas 75006, 214-446-9055.

SEIKO

- A drawback to this strategy is that considerable resources must be devoted to make end users aware of the unique advantages of a differentiated product.

- This strategy will often be a good alternative to Oki because of Oki's established "Cadillac" reputation and engineering expertise.

2. RECOMMENDED OKI STRATEGIES

- Depending on the product, appropriate marketing strategies will vary substantially. In general, given Oki's strengths in technology and low-cost production, and its lack of presence in any of the examined markets except printers, Oki should look at the differentiated product strategy and a modified complete system strategy. It is also possible that a hybrid of these two strategies would be best for Oki. INPUT is available to support developing such a strategy if that is desired.

a. PBXs

- The breakup of AT&T has provided Oki with a superb opportunity to establish new distribution channels quickly and relatively painlessly. As noted earlier, the RBOCs are actively searching for new equipment suppliers; these companies are ideal distributors for Oki PBXs. They are already well-financed and staffed with trained personnel.

- INPUT recommends that Oki concentrate its PBX marketing efforts on distributing through RBOCs.

b. Modems

- The threat of bundling modems into computers by computer manufacturers, and the difficulty of new entry into this market due to the advantages of Hayes and other entrenched manufacturers, makes the modem marketplace particularly unattractive for Oki; INPUT recommends that Oki avoid this market.

- If Oki decides to enter this market, however, the best distribution strategy would be commodity/OEM. Oki's strong identification and distribution at the retail level, due to its printers, gives it some leverage in entering this market.

c. Microcomputers

- A head-to-head strategy against IBM, Apple, and AT&T—using, for example, IBM PC-compatible machines—is almost certainly doomed to failure. There are simply too many microcomputer manufacturers with too much experience producing too many machines for Oki to make much headway, even with a commodity strategy.

- The only possible strategy in this marketplace involves developing niches either through differentiation of the product (portable, combined with phone, etc.) or entering vertical markets. Oki could concentrate on a packaged system targeted to one particular industry such as HP's targeting of the engineering environment.

- Oki's technological strength makes differentiation by product the favored alternative. Additional consumer research beyond the scope of this report would be needed to identify the features required in a product to support this strategy. A benefit shared with our recommendation for modems is that Oki can benefit from its established name and distribution strength at the retail level.

3. PRINTERS

- Oki is already very successful in this business, having established itself as the "Cadillac" of printer manufacturers, as one of the retailers we talked to termed it.

- The high-end premium strategy of Oki will serve very well in the years to come. Oki needs to maintain its technological lead and, in particular, keep up with laser printing technology. It is already well established in a market peculiarly suited to independent manufacturers, and "more of the same" will serve it well.

4. DISK DRIVES

- OEM distribution of high-quality low-cost drives is the most obvious strategy available in this commodity marketplace. OEMs are complaining about quality and availability, so there is a real opportunity here.

- If Oki can offer new technology drives such as 3.5 inch or vertical-dispersion drives, it can command higher premiums. And INPUT recommends that Oki aim toward providing newer technology drives in high demand to OEMs.

B. RECOMMENDED ACTIVITIES FOR CORPORATE IMAGE DEVELOPMENT

- There is no doubt that a premier advertising agency is an absolute prerequisite to successful corporate image development at the retail level, and this development is very important for those strategies outlined above involving retail distribution.

- The problem is that many of the best agencies are already representing systems vendors and are not available to Okidata because of conflict-of-interest considerations. Occasionally an agency is dropped: HP got rid of J. Walter Thompson, which is now actively seeking a new systems vendor client. This type of agency would be an ideal mate for Oki; it already understands the market and one of the competitors extremely well.

- HP dropped J. Walter Thompson because its personal computer sales were disappointing even after extensive advertising. The company also wanted to try a new approach, partly because they had never done major consumer advertising before. J. Walter Thompson learned a great deal through its relationship with HP and is eager to participate in the computer business.

- Of course, the importance of marketing a quality product with good post-sale service cannot be overemphasized in building a corporate image. Bad reputations can be made all too quickly in this industry and are extremely difficult to correct.

- Okidata, incidently, was mentioned positively in this regard by several respondents who perceive Okidata printers as being top of the line in quality and performance. Epson, on the other hand, was chastised for its poor technical support. This is a critical failing at the retail level for printers because the retailer has great influence in the sale.

C. OPTIMAL DISTRIBUTION OF PROMOTIONAL BUDGET FOR MAXIMUM EFFECTIVENESS

- INPUT's recommended distribution of advertising and promotion budgets by product and medium are shown in Exhibit IX-2.

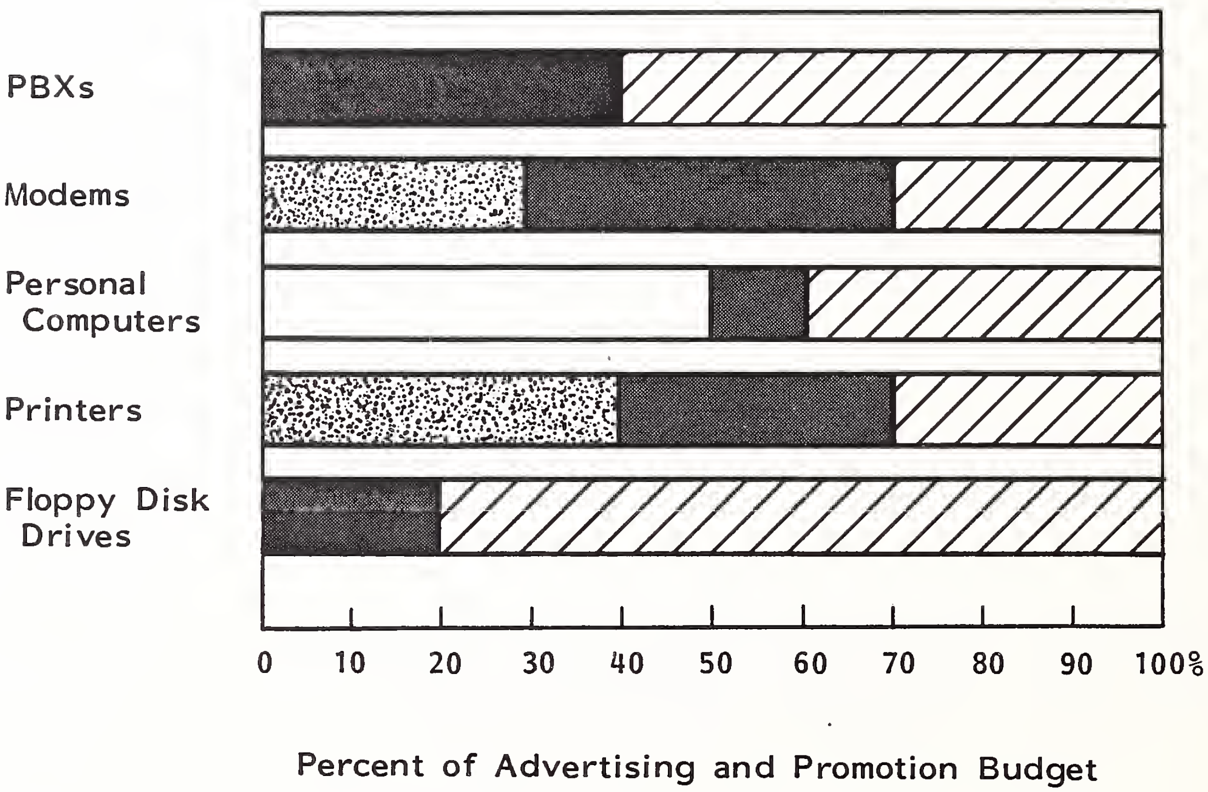
- Should a complete systems strategy be chosen, very considerable television and business publication advertising would be a necessity; for this reason a complete systems strategy may be unattractive.

- End users must be targeted if the differentiated product strategy is adopted. Except for computer systems, television and business magazines are poor media for communicating to end users. Much better are computer specialty magazines like PC World and Infoworld. For vertical markets, industry trade journals are effective.

EXHIBIT IX-2

RECOMMENDED DISTRIBUTION OF OKI's ADVERTISING AND PROMOTION BUDGET

(Non-Radio/Television)



Trade Shows

Dealer Magazine and Electronics Trade Journal Advertisements

Computer Specialty Magazine Advertisements

Vertical Market Trade Journal Advertisements

- Any strategy involving dealers ("commodity" and "differentiated product" in this case) should include advertising in the dealer trade magazines (Computer Retail News, Micro Marketworld, Computer and Software News). This will aid in developing a rapport with the dealers, create awareness of available products (very important in the differentiated product strategy), and establish credibility. Super dealer relations are absolutely crucial to any strategy that includes dealers in the distribution channel.

- Exhibits are waning in importance, but attendance at the major national shows--Comdex and NCC in particular--is still important for any of the strategies. More shows should be attended to exhibit products using the differentiated product stragegy.

- The new trade marts like the Dallas Infomart provide a particularly interesting opportunity to a company that develops a full range of products. Trade marts are very costly, and Oki should wait to see how effective they are before participating in them.

D. RECOMMENDED BUDGET LEVELS

- A great many of the vendors interviewed set their advertising budgets as a percent of sales. This is a poor approach, since the percentage will vary widely depending on the product and marketing strategy developed.

- A much more rational process for determining advertising budgets is the objectives-and-task approach, in which objectives for awareness are set and the tasks required to achieve these objectives are calculated and priced. This also encourages measurement, to be certain the objectives are met.

- Still, general guidelines on advertising budgets as a percent of sales can at least serve as a basis for comparison and discussion. Exhibit IX-3 shows guidelines for advertising and promotion budgets as a percent of sales.

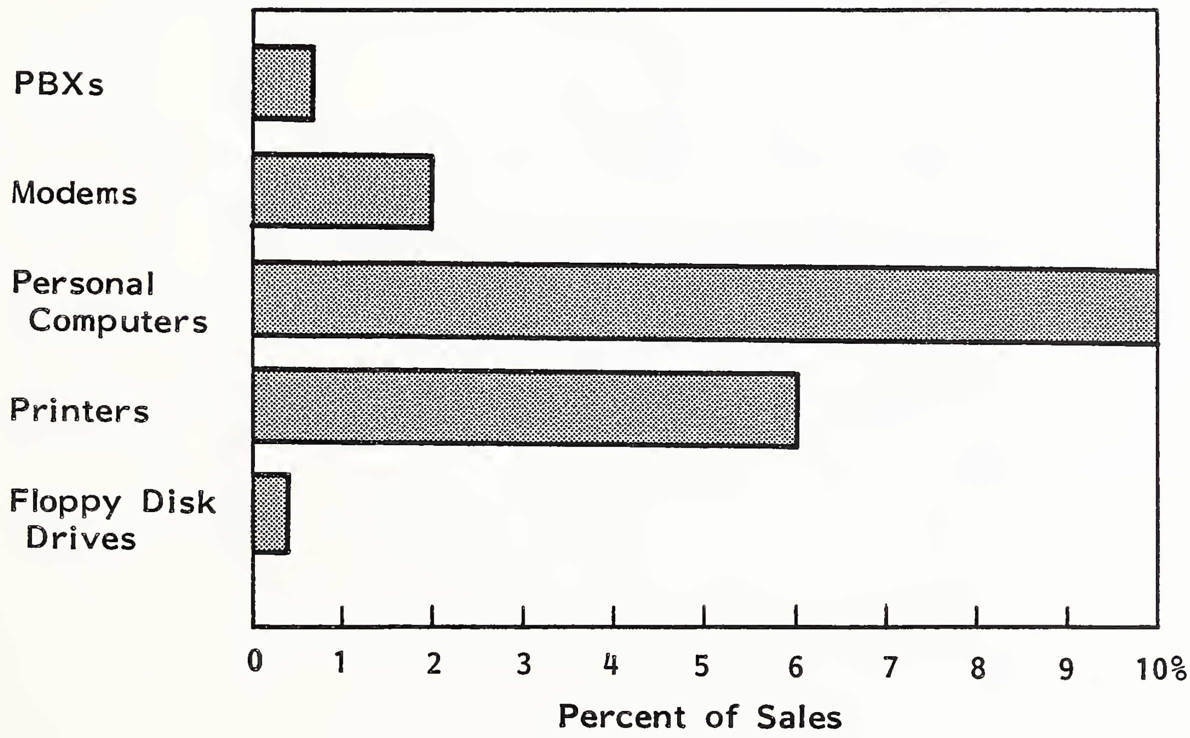
- A strategy emphasizing sales to OEMs--a commodity strategy--will require a small advertising budget. One company said it spends only 0.3% of sales on advertising; this would not be unreasonable for a company selling brand name items to end users.

- A complete systems strategy (or, to a lesser extent, a differentiated product strategy), for long-term success, must involve tremendous up-front advertising spending--perhaps an amount even greater than sales for the first few months. An intriguing precedent has been set along these lines by Leading Edge Products, which advertised its word processor software and its PC months before they were actually shipped. Its teaser ads sparked interest and anticipation in the trade and among potential end users. An interesting fallout of this strategy is that leading edge got enormous free press along the way.

- The largest budget given in our survey was 10% of sales.

EXHIBIT IX-3

RECOMMENDED ADVERTISING AND PROMOTION BUDGETS



X OPTIMAL METHODS OF PRODUCT ADVERTISING AND PROMOTION

X OPTIMAL METHODS OF PRODUCT ADVERTISING AND PROMOTION

A. METHODS BY PRODUCT TYPE

1. PBXs

- Very little advertising is needed in this category if Oki distributes through RBOCs as INPUT recommends. Promotion would be the responsibility of the RBOCs.

- The most important promotion will simply be informing RBOCs that Oki is seeking partners. This can be accomplished by attending major telecommunications trade shows, such as Interface.

2. MODEMS

- Very little end-user-oriented advertising will be necessary for modem distribution if Oki adopts the commodity strategy; most sales will be made based on the recommendation of dealers.

- Attracting dealer attention and maintaining their loyalty, however, is extremely important. This may be accomplished by direct campaigns to dealers; advertising in dealer trade magazines such as Computer Retail News; and participating in trade shows that dealers frequent, especially NCC, Comdex, and big regional computer shows.

3. PERSONAL COMPUTERS

- Oki should not go head to head against the big spenders in the personal computer marketplace, IBM and Apple. But with a product differentiation strategy oriented toward one or two vertical markets, advertising expenses could be minimized.

- What could be required is moderate advertising (and press relations activities) in trade publications of the industries targeted. Attendance at the industries' trade shows would also be important.

4. PRINTERS

- Advertising is very important in the printer market because of its after-market branded character.

- According to advertising agencies, a particularly effective medium for promotion in this segment is in-store displays and demonstrations. It would be in Okidata's best interest to create incentives for dealers to use Okidata printers in their demonstrations of computer printers.

- Additionally, heavy advertising in computer specialty magazines is appropriate.

5. FLOPPY DISK DRIVES

- Since almost all sales of floppy disk drives are made to OEMs, there is little opportunity for promotion except by attendance at OEM-oriented exhibitions and advertising in computer trade magazines.

B. METHODS BY DISTRIBUTION CHANNEL

1. DISTRIBUTORS' RETAIL STORES

- Three magazines are targeted to computer distributors and retailers: Computer Retail News, Micro Marketworld, and Computer and Software News. These are very effective media for maintaining contact with retailers.

- Additionally, direct mail is effective; trade shows, especially regional computer shows, are also helpful.

2. SYSTEM INTEGRATORS

- This channel is not well organized and is very difficult to market to in a coordinated way. The best way of communicating to integrators is probably by attending the major trade shows--Comdex and NCC--and by advertising in major computer trade journals. Also, some of the computer trade journals have sections for these vendors. Direct mail lists are available, although accuracy may be weak on the low end.

3. OEMs

- The best marketing communications channel to OEMs is undoubtedly personal contact.

- The OEMs are few enough--and deals are big enough--to merit senior sales calls. Little advertising is necessary.

C. METHODOLOGIES FOR EVALUATING THE EFFECTIVENESS OF ADVERTISING

- Techniques for evaluating advertising effectiveness will vary by medium.

- For advertisements in trade journals and computer specialty magazines, evaluation is easy; one simply counts the "bingo card" responses from readers and establishes a tracking system to determine the quality of these leads.

- Advertisements in magazines without "bingo" cards are tougher. To be done properly, Oki should engage an outside agency such as Starch INRA Hooper, Inc. to perform a readership effectiveness study when these types of magazines are used. These studies must continue for long periods to really determine effectiveness.

- Image advertising requires long-term commitment and consistency of image. It takes time to gain image awareness. Engaging an outside agency to measure this facet is also important.

- Lead cards generated at trade shows should be monitored to measure exhibition effectiveness.

- Oki should ensure that sales lead reports include comments on how persons learned of Oki's product and whether they remember any Oki ads.

- If Oki receives sales inquiries through INWATS telephone lines, these inquiries should be recorded and evaluated just as field sales leads are.

- Sales are the ultimate measure of advertising effectiveness and should be compared carefully with advertising campaigns and promotions.

APPENDIX A: TRADE SHOWS

APPENDIX A

TRADE SHOWS

Dates	Show	Place	Contact
July 1984			
July 9-12	1984 National Computer Conference	Las Vegas Convention Center	American Federation of Information Processing Societies, (703) 620-8900
July 11-14	NOMDA 59th Annual Convention and Trade Show	Dallas Convention Center	NOMDA PR Department, (312) 860-9400
July 15-18	1984 Issue Conference International SPSS Software Users Exchange	Chicago Drake Hotel	Issue Inc. (312) 329-2400
July 23-27	SIGGRAPH '84	Minneapolis Convention Hall	SIGGRAPH '84 Conference Office, (312) 644-6610
July 24-26	World Congress & Exposition on Incentive Travel & Meeting Management	New York City Coliseum	Hall-Erickson, Inc., (312) 346-1733
August 1984			
Aug. 2-5	1st Annual Tampa Bay Computer Show & Office Equipment Expo	Tampa, Fla. Curtis Hixon Convention Center	CompuShows, Inc. (800) 368-2066, in Md. (301) 263-8044
Aug. 13-15	IEA Annual Conference and TS-2	San Antonio, Tx. Convention Center	IEA (312) 359-8160
Aug. 19-23	Computers/Graphics in the Building Process (BP'84)	San Francisco Hyatt Regency Embarcadero Cntr.	BP'84, (202) 775-9556
Aug. 23-25	PC/Perspective '84	Washington, D.C. Convention Center	J. Spargo & Associates, (703) 425-8590

Continued

APPENDIX A (Cont.)

TRADE SHOWS

Dates	Show	Place	Contact
September 1984			
Sep. 5-7	The National Software Show	Anaheim, Calif. Convention Center	Raging Bear Productions, Inc. (800) 732-2300, in Calif. (415) 924-1194
Sep. 6-9	Byte Computer Show	San Francisco Brooks Hall Civic Auditorium	The Interface Group, Inc. (617) 449-6600
Sep. 11-13	Electronic Imaging '84	Boston Mass. Westin Hotel	Morgan-Grampian Expositions Group, (212) 340-9780
Sep. 11-13	Midcon/84	Dallas Convention Center	Electronic Conventions Management, (213) 772-2965
Sep. 11-13	Mini/Micro Southwest	Dallas Convention Center	Electronic Conventions Management, (213) 772-2965
Sep. 11-14	Unix Systems Expo/'84	Los Angeles Convention Center	Computer Faire, Inc., (617) 965-8350
Sep. 18-20	Semicon/East'84	Boston, Mass. Hynes Auditorium	M.B. Kern, SEMI, (415) 964-5111
Sep. 20-23	The Personal Computer Userfest	New York City Madison Square Garden	Northeast Expositions, (800) 841-7000, in Mass. (617) 739-2000
Sep. 24-25	World Conference on Ergonomics in Computer Systems	Los Angeles Sheraton Premier	Thomas L. Richmond, Inc. (212) 581-4200
Sep. 24-26	IBM PC-Compatible Trade Show (PCExpo)	Anaheim, Calif Convention Center	PCExpo, J. O'Rourke, (201) 569-8542
Sep. 26-27	World Conference on Ergonomics in Computer Systems	Chicago Drake Hotel	Thomas L. Richmond, Inc. (212) 581-4200

Continued

APPENDIX A (Cont.)

TRADE SHOWS

Dates	Show	Place	Contact
September 1984 (Cont.)			
Sep. 27-28	World Conference on Ergonomics in Computer Systems	New York Plaza Hotel	Thomas L. Richmond, Inc. (212) 581-4200
Sep. 27-30	5th Annual Mid-Atlantic Computer Show & Office Equipment Expo	Washington, D.C. Convention Center	CompuShows, Inc. (800) 368-2066, in Md. (301) 263-8044
October 1984			
Oct. 1-3	Discovery '84: Technology for Disabled Persons	Chicago McCormick Inn	K.Adsit, University of Wisconsin-Stout (715) 232-1333
Oct. 1-4	Information Management Exposition and Conference (Info'84)	New York City Coliseum	Clapp & Poliak, (800) 223-1956 in New York State, (212) 661-8010
Oct. 2-4	5th Annual Southwest Semiconductor & Electronics Expo	Phoenix, Ariz. Civic Plaza Convention Center	Cartlidge & Associates, Inc. (408) 554-6644
Oct. 2-4	Northcon/84	Seattle Center Coliseum	Electronic Conventions, Inc. (213) 772-2965
Oct. 2-4	Mini/Micro Northwest '84	Seattle Center Flag Pavillion	Electronic Conventions, Inc. (213) 772-2965
Oct. 3-5	PC-World Exposition	Dallas Market Hall	Mitch Hall Associates, (617) 329-7466
Oct. 4-7	InTech '84	Dallas Convention Center	R. Boesch, National Trade Productions, Inc., (800) 638-8510, in Md., (301) 459-8383

Continued

TRADE SHOWS

Dates	Show	Place	Contact
October 1984 (Cont.)			
Oct. 11-14	1984 Computer Expo & PC Faire	Sacramento, Calif. Exposition Centre	1984 Computer Expo & PC Faire, (916) 924-9351
Oct. 15-19	International Test Conference	Philadelphia, Pa Wyndham Franklin Plaza Hotel	Doris Thomas, (201) 267-7120
Oct. 16-18	West Coast Electronic Office Expo & Conference	San Jose, Calif. Convention Center	Cartlidge & Assoc., Inc. (408) 554-6644
Oct. 16-18	UNIX Operating System Exposition & Conference	New York City Sheraton Centre Hotel	R. Birkfeld, National Expositions Co., Inc. (212) 391-9111
Oct. 17-21	1984 NOPA Annual Convention & Exhibit	Chicago McCormick Place	C. Hodges, NOPA Convention Dept. (703) 549-9040
Oct. 23-24	Semicon/Southwest '84	Dallas Market Hall	S. Castillo, SEMI, (415) 964-5111
Oct. 25-27	3rd Annual Twin Cities Computer Show	Minneapolis Auditorium	Northwest Expositions, (800) 343-2222, in Mass. (617) 739-2000
Oct. 30-Nov. 1	ATE Central Conference	Dallas Convention Center	Morgan-Grampian Expositions Group, (212) 340-9780
Oct. 30-Nov. 1	Cadcon Central Conference	Dallas Convention Center	Morgan-Grampian Expositions Group, (212) 340-9780
Oct. 30-Nov. 2	Mini/Micro West '84	Anaheim, Calif. Convention Center	Electronic Conventions, (213) 772-2965
Oct. 30-Nov. 2	Wescon/84	Anaheim, Calif. Convention Center	N. Hogan, Electronic Conventions, (213) 772-2965

Continued

APPENDIX A (Cont.)

TRADE SHOWS

Dates	Show	Place	Contact
November 1984			
Nov. 1-4	7th Annual Northeast Computer Show	Boston Hynes Auditorium	Northeast Expositions, (800) 343-2222
Nov. 11-14	Information Industry Association 16th Annual Conference & Expo	San Francisco Sheraton Palace	IIA, (202) 544-1969
Nov. 13-15	CMC '84	Chicago Expocenter	G. Borkovich, Conference Director, (215) 384-7262
Nov. 14-18	Comdex/Fall	Las Vegas Convention Center	The Interface Group, Inc., (800) 325-3330, in Mass., (617) 449-6600
Nov. 16-17	6th Annual FORTH Convention and Banquet	Palo Alto, Calif. Hyatt	FORTH Interest Group, (415) 962-8653
Nov. 29-Dec. 1	1st Annual Carolinas Computer Show & Office Equipment Expo	Charlotte, N.C. Civic Center	CompuShows, Inc. (800) 368-2066, in Md., (301) 263-8044

Continued

APPENDIX A (Cont.)

TRADE SHOWS

Dates	Show	Place	Contact
December 1984			
Dec. 5-7	The New York Software Connection	New York City Coliseum	Conference Management Corp., (203) 852-0500
Dec. 5-7	4th Annual Videodisk & Optical Disk Conference	Washington, D.C. Hilton Hotel	Meckler Publishing, (203) 226-6967
Dec. 6	California Computer Show	Palo Alto, Calif. Hyatt Palo Alto	Norm DeNardi Enterprises, (415) 941-8440
Dec. 6-8	Great Southern Business & Computer Shows and Seminars	Tallahassee, Fla. Leon County Civic	Great Southern Computer Shows, (904) 356-1044
Dec. 6-9	Computer Showcase Expo	Washington, D.C. Convention Center	The Interface Group, Inc. (800) 325-3330
Dec. 11-14	Dexpo West '84	Anaheim, Calif. Disneyland Hotel	Expoconsul International, Inc. (609) 799-1611
Dec. 13-16	4th Annual Southeast Computer Show and Software Exposition	Atlanta Civic Center	CompuShows, Inc. (800) 368-7066

Continued

APPENDIX A (Cont.)

TRADE SHOWS

Dates	Show	Place	Contact
January 1985			
Jan. 5-8	1985 International Winter Consumer Electronics Show	Las Vegas Las Vegas Con-	Electronics Industries Association, (202) 457-8700
Jan. 8	Invitational Computer Conference	Irvine, Calif. Irvine Marriott	B.J. Johnson & Assoc. (714) 957-0171
Jan. 8-10	COM-STRUCT '85/ Computers, Communications & Office Systems for Construction	Boston Bayside Exposition Center	A. Wahtera, Slater Publications, (617) 449-31916
Jan. 9-10	IC Assembly Conference & Exposition	San Jose, Calif. Le Baron Hotel	M. Nagel, Intem, (415) 595-2803
Jan. 28-31	Communication Networks Conference & Expo.	Washington, D.C. Washington Convention Center	J. McDaid, CW Conference Management Group (305) 737-9059
Jan. 29	Invitational Computer Conference	Houston Adam's Mark	B.J. Johnson & Assoc. (714) 957-0171

Continued

APPENDIX A (Cont.)

TRADE SHOWS

Dates	Show	Place	Contact
February 1985			
Feb. 5-7	Mini/Micro West '85	Anaheim, Calif. Anaheim Hilton	T. Parrott, Electronic Conventions, (213) 772-2965
Feb. 8-10	Stride Faire '85	Reno, Nev. MGM Grand Hotel/ Casino	Contact L. Smith, Stride Micro. (702) 322-6868
Feb. 10-13	Personal Compu - ters - Now in Business	Dallas Infomart Dallas, Texas	Index/Management, (214) 655-6207
Feb. 16-20	International Software Update	Kauai, Hawaii Waiohai Resort	P. Russell, Raging Bear Productions, (415) 924-1194
Feb. 20-22	Info/Central Info/Software	Rosemont, Ill. O'Hare Exposition	Show Manager, Cahners Exposition Group (203) 964-8287
Feb. 23	Solutions '85 - "Profits Thru Partnerships"	Phonenix, Arix. Hyatt Regency Hotel	F.C. Redfern, Eclectic Communications, (602) 968-3618
Feb. 26	Invitational Com- puter Converence	Ft. Lauderdale, Fl. Marriott Hotel	B.J. Johnson & Assoc. (714) 957-0171
Feb. 26-28	Automated Design and Engineering for Electronics Exposition '85	Anaheim, Calif. Anaheim Hilton & Towers	M. Indovina, Cahners Exposition Group, (312) 299-9311

Continued

APPENDIX A (Cont.)

TRADE SHOWS

Dates	Show	Place	Contact
March 1985			
Mar. 5-7	Federal Office Systems Expo	Washington, D.C. Washington Convention Center	R. Boesch, National Trade Productions, Inc. (800) 638-8510
Mar. 18-20	Comtel '85 International Computer & Telecommunications Conference	Dallas Dallas Infomart	B.J. Johnson and Assoc. (714) 957-0171
Mar. 19	Invitational Computer Con- ference	Palo Alto, Calif. Hyatt Palo Alto	Hamman, Crume & Co. (214) 637-4526
Mar. 22-24	3rd Annual Mary- land Computer Show and Software Exposition	Baltimore Convention Center	CompuShows, Inc. (800) 368-2066
Mar. 25-28	Megatech	Dallas Dallas Infomart	Megatech, (800) 323-5155
Mar 30- Apr. 2	10th West Coast Computer Faire	San Francisco Moscone Center	Computer Faire, Inc. (617) 965-8350
Mar. 31- Apr. 3	Softcon	Atlanta Georgia World Congress Center	Northeast Expostions, (617) 739-2000

Continued

TRADE SHOWS

Dates	Show	Place	Contact
April 1985			
Apr. 2	1984/85 Invitational Computer Conference	Nashua, N.H. Sheraton Nashua	B.J. Johnson & Assoc. (714) 957-0171
Apr. 10-11	NEPCON Southwest '85	Dallas Dallas Infomart	Cahner's Exposition Group (312) 299-9311
Apr. 16-18	ATE Northwest	San Mateo, Calif.	Morgan-Grampian Expositions Group, (212) 340-9780
Apr. 18-19	Network Management/Technical Control	Boston Marriott Copley Place	J. McDaid, CW Conference Management Group (305) 737-9059
Apr. 23-25	ElectroTest '85	Orlando, Fla Orange County Convention Center	Cahner's Exposition Group (312) 299-9311
Apr. 23-25	Electro/85	New York, N.Y. New York Coliseum	Electronic Conventions Management, (213) 772-2965
Apr. 23-26	UNIX Systems Expo	San Francisco Moscone Center	B. Littlefield, Computer Faire, (617) 965-8350
Apr. 25-28	4th Annual New York Computer Show and Software Exposition	Long Island Nassau County Coliseum	CompuShows, Inc. (800) 368-2066

Continued

APPENDIX A (Cont.)

TRADE SHOWS

Dates	Show	Place	Contact
May 1985			
May 1-3	First Scientific Computing Conference and Exposition	Atlantic City, N.J. Atlantic City Center	S. Ernst, Expocon Management Association Inc. (201) 361-9060
May 21-23	CADCON Central '85	Rosemont, Ill. O'Hare Exposition Center	Morgan-Grampian Expositions Group, (212) 340-9780
June 1985			
Jun. 19-21	NEPCON East '85	Boston Bayside Exposition	Cahners Exposition Group (312) 299-9311
Jun. 24-26	VideoTex '85	New York, N.Y.	Online Conferences, Inc. (212) 279-8800

APPENDIX B: LIST OF REGIONAL BELL OPERATING COMPANIES BY REGIONAL HOLDING COMPANY

APPENDIX B: LIST OF REGIONAL BELL OPERATING COMPANIES BY REGIONAL HOLDING COMPANY

AMERITECH

1) Illinois Bell
   225 W. Randolph Street
   Chicago, Ill 60606
   (312) 772-9411

2) Indiana Bell
   240 N. Meridian Street
   Indianapolis, IN 46204
   (317) 265-2266

3) Michigan Bell
   444 Michigan Avenue
   Detroit, MI 48226
   (313) 223-9900

4) Ohio Bell
   100 Erieview Plaza
   Cleveland, OH 44114
   (216) 822-9700

5) Wisconsin Bell
   722 North Broadway
   Milwaukee, WI 53202
   (414) 456-3000

BELL ATLANTIC

1) New Jersey Bell
   540 Broad Street
   Newark, NJ 07101
   (201) 649-9900

2) Bell of Pennsylvania
One Parkway
Philadelphia, PA 19102
(215) 466-9900

3) C & P Telephone Company
2055 L Street, N.W.
Washington, D.C. 20036
(202) 392-9900

4) C & P of Virginia
1500 MacCorkle Avenue, S.E.
Charleston, W. VA 25314
(304) 343-9911

5) C & P of Maryland
1 East Pratt Street
Baltimore, MD 21202
(304) 343-9911

6) Diamond State
Same as Bell of PA

BELLSOUTH CORPORATION

1) BellSouth Corporation
675 West Peachtree Street, N.E.
Atlanta, GA 30375
(404) 420-8600

2) Southern Bell
Same address as above

3) South Central Bell
600 North 19th Street
Birmingham, AL 35203
(205) 321-1000

NYNEX CORPORATION

1) Nynex Corporation
400 Westchester Avenue
White Plains, NY 10604
(914) 683-2121

2) Executive offices as of January 1, 1984:
335 Madison Avenue
New York, NY 10017
(212) 370-7400

Above addresses for New England Tel and New York Tel

PACIFIC TELESIS GROUP

1) Pacific Telesis Group
140 New Montgomery Street
San Francisco, CA 94105
(415) 542-9000

2) Pacific Bell
Same as above

3) Nevada Bell
645 E. Plumb Lane
Reno, NV 89520
(702) 789-6000

SOUTHWESTERN BELL CORPORATION

1) Southwestern Bell
1010 Pine Street
St. Louis, MI 63101
(314) 247-8900

2) The Telephone Company
Address same as above

U.S. WEST INCORPORATED

1) U.S. West
7800 E. Orchard Road
Englewood, CO 80111
(303) 793-6500

2) Mountain Bell
931 Fourteenth Street
Denver, CO 80202
(303) 624-2424

3) Northwestern Bell
1314 Douglas-on-the-Mall
Omaha, NE 68102
(402) 422-2000

4) Pacific Northwest Bell
1600 Bell Plaza
Seattle, WA 89191
(206) 345-2211

APPENDIX C: ADVERTISING AGENCIES

APPENDIX C: ADVERTISING AGENCIES

FOOTE, CONE & BELDING COMMUNICATIONS, INC.
401 North Michigan Avenue
Chicago, IL 60611
(312) 467-9200
Selected Accounts: Epson, Data General

J. WALTER THOMPSON U.S.A.,INC.
466 Lexington Avenue
New York, NY 10017
(212) 210-7000
Selected Accounts: ComputerLand, Hewlett-Packard (recently lost), Northern Telecom Inc.

EBEY, UTLEY & COMPANY (VAN BRONKHORST)
2672 Bayshore Road
Mountain View, CA 94043
(415) 968-7570
Selected Accounts: Fujitsu America, ISI International Corporation, Faraday Electronics

CARTER CALLAHAN ADVERTISING AND PUBLIC RELATIONS
607 North First Street
San Jose, CA 95112
(408) 998-5433
Selected Accounts: Acrian Telecom Inc., Icot Corporation (data communications products)

DOYLE DANE BERNBACH INTERNATIONAL, INC.
437 Madison Avenue
New York, NY 10022
(212) 826-2000
Selected Accounts: IBM Product Centers office equipment (includes PC's), GTE Business Communications Systems, Cygnet Technologies Inc. (PC Comm CoSystems), Tymshare Inc. Equipment Product Marketing Division (terminals and printers)

DANCER FITZGERALD SAMPLE, INC.
405 Lexington Avenue
New York, NY 10174
(212) 661-0800
Selected Accounts: Grid Systems, Amdahl Corporation

BOZELL AND JACOBS, INC.
One Dag Hammarskjold Plaza
New York, NY 10017
(212) 705-6000
Selected Accounts: AT&T, Control Data Corporation

WINKLER, TAWA, McMANUS
4701 Patrick Henry Drive
Santa Clara, CA 95054
(408) 727-1943

TYCER FULTZ BELLACK
1731 Embarcadero Road
Palo Alto, CA 94303
(415) 856-1600
Selected Accounts: ASK Computers, Racal-Vadic, Maxton Corporation (Winchester Disks)

CHIAT/DAY INC.
517 South Olive Street
Los Angeles, CA 90013
(213) 622-7454
Selected Accounts: Apple Computer, Businessland, Mitsubishi Electric, Shugart Corporation (disk drives)

BATTENBERG, FILLHARDT & WRIGHT
70 North Second Street
San Jose, CA 95113
(408) 287-8500
Selected Accounts: Quantum Corporation (disk drives), Ungermann and Bass (data networking)

LORD, GELLER, FEDERICO, EINSTEIN, INC.
655 Madison Avenue
New York, NY 10021
(212) 421-6050
Selected Accounts: Continental Telecom Inc., IBM PC

AD INFINITUM
1020 Marsh Road, Suite 220
Menlo Park, CA 94025
(415) 324-4566

WINSTON ADVERTISING INC.
3530 West Bayshore Road
Palo Alto, CA 94303
(415) 856-6677

APPENDIX D: VENDOR QUESTIONNAIRE

APPENDIX D:
VENDOR QUESTIONNAIRE

INPUT is undertaking a national study of advertising and promotion strategies and distribution channels for a major foreign manufacturer of small computers and peripherals. Your firm, being a prominent advertiser for this industry, has been selected to participate.

1. Please rate the effectiveness of the following media from 1-10 (qualitative judgment on why this mode is preferred).

	PCs	Drives	Printers	Modems	PBXs
Computer-oriented print media					
General print media					
In-store displays					
Radio					
Direct mail					
Co-op advertising (note if double-counted)					
National newspapers					
Local newspapers					
Dealer-oriented magazines					
Exhibitions					
Other (please describe)					

2. Why is ______________________________ so dominant a medium?

3. Please rate the effectiveness of the following exhibitions from 1-10.

_____ NCC

_____ Comdex

_____ National Consumer Electronics Show

_____ Regional computers shows

_____ Vertical market shows (i.e., banking conferences)

_____ Other (please describe) ________________________________

4. Do you recommend that your clients participate in the new trade marts? Why?

5. How do you recommend your clients set their advertising budgets?

Examples:

- As a percent of sales
- Competitive parity (i.e., match competitors)
- Objective-and-task method (i.e., setting objectives; specifying tasks needed to accomplish objectives, and estimating costs of these tasks)

6. What percent of sales should advertising budgets be for each of the following product lines? (range ok)

    Microcomputers

    Modems

    Disk drives

    Printers

    PBXs

    Why do these differ?

7. What would an ideal advertising/promotion ratio be? How much does it vary by product, and why? (range ok)

    PBXs

    Disk Drives

    Microcomputers

    Modems

    Printers

8. How do you or your clients measure the effectiveness of your advertising?

9. How do you suggest that a peripherals or microcomputer manufacturer select an advertising agency?

10. Is it a good idea to engage a PR agency too? Why?

11. Which company has the best advertising and promotion strategy in the printer market? Why?

12. Which company has the best advertising and promotion strategy in the modem market? Why?

13. Which company has the best advertising and promotion strategy in the microcomputer market? Why?

14. Which company has the best advertising and promotion strategy in the PBX market? Why?

15. Which company has the best advertising and promotion strategy in the disk drive market? Why?

Thank you for participating! (Confirm name, title, address.)

APPENDIX E: DISTRIBUTION CHANNEL QUESTIONNAIRE

APPENDIX E:

DISTRIBUTION CHANNEL QUESTIONNAIRE

INPUT is undertaking a national study of advertising and promotion strategies and distribution channels for a major foreign manufacturer of computer peripherals, microcomputers, and PBXs. Your firm, being prominent in this industry, has been selected to participate. We would like to ask you a series of questions that will help this company better serve your needs. In return for your time, INPUT is prepared to mail you an executive summary of the study.

1. What is the importance of each of the following factors in your decision to stock a particular product, on a scale of 1-10 (10 = high)?

    _____ Product availability

    _____ Manufacturer financing support

    _____ Cost

    _____ Advertising support

    _____ Distributor support

    _____ Manufacturer support

    _____ Maintainable margins

    _____ End-user demand

    _____ Warranty

    _____ Manufacturer returns policy

    _____ Corporate stocking policy (explain)

    _____ Other (explain)

2. Why is ________________________ so dominant a factor?

3. Would the importance of these factors vary at all by type of product? For example, would factors in stocking computers vary significantly from printers or floppy disk drives - or between floppy drives and hard disks?

4. Which manufacturer is the most effective distributor of floppy disk drives and hard disk drives? Why? How do you see floppy disk drive manufacturers' roles changing by 1987.

5. Which manufacturer is the most effective distributor of modems? Why? How do you see modem manufacturers' roles changing by 1987?

6. Which manufacturer is the most effective distributor of printers? Why? How do you see printer manufacturers' roles changing by 1987?

7. Which manufacturer is the most effective distributor of microcomputers? Why? How do you see microcomputer manufacturers' roles changing by 1987?

8. Which manufacturer is the most effective distributor of PBXs? Why? How do you see PBX manufacturers' roles changing by 1987?

9. What range of margins do you now make on the following products?

Microcomputers

Printers

Modems

Floppy disk drives

Hard disks

PBXs

10. Which of the following media is most effective in helping you market computers and peripherals?

Please rate from 1-10 (qualitative judgment on why this mode is preferred).

_____ Computer-oriented print media

_____ General print media

_____ In-store displays

_____ Radio

_____ Direct Mail

_____ Co-op advertising (note if double-counted)

_____ National newspapers

_____ Local newspapers

_____ Dealer-oriented magazines

_____ Exhibitions

_____ Press releases

_____ Other (describe) ______________________________

11. Why is ______________________ so dominant?

12. How does effectiveness differ for various products - i.e., are computer specialty magazines more effective for peripherals than for computers?

13. Which of the following exhibitions do you attend?

    _____ NCC

    _____ Comdex

    _____ National Consumer Electronics Show

    _____ Regional computers shows

    _____ Vertical market shows (i.e., banking conferences)

    _____ Other (describe) ______________________________

14. Why do you attend trade shows?

15. What changes do you see in the relationships between manufacturers and distributors over the next three years?

16. Do these changes very by product line? That is, do they vary between printers, modems, PCs, and disk drives?

Thank you for participating!

APPENDIX F: ADVERTISER QUESTIONNAIRE

APPENDIX F
ADVERTISER QUESTIONNAIRE

INPUT is undertaking a national study of advertising and promotion strategies and distribution channels in the _______________ industry. Your firm, being prominent in this industry, has been selected to participate. In return for your time, INPUT is prepared to mail you an executive summary of the study.

1. Who is your advertising agency?

2. Are you satisfied with the agency? What has it done well, and what could it do better?

3. How did you select this agency?

4. Do you have a PR agency? Who?

5. Why did you engage a PR agency?

6. How did you select this agency?

7. Are you satisfied with the agency? What has it done well, and what could it do better?

8. Please rate the effectiveness of the following media from 1-10 (qualitative judgment on why this mode is preferred).

_____ Computer-oriented print media

_____ General print media

_____ In-store displays

_____ Radio

_____ Direct mail

_____ Co-op advertising (note if double-counted)

_____ National newspapers

_____ Local newspapers

_____ Dealer-oriented magazines

_____ Exhibitions

_____ Other (describe) ______________________________

9. Why is ____________________ so dominant?

10. Please rate the effectiveness of the following exhibitions from 1-10.

_____ NCC

_____ Comdex

_____ National Consumer Electronics Show

_____ Regional computer shows

_____ Vertical market shows (i.e., banking conferences)

_____ Other (describe) ______________________________

11. Are you planning on participating in the new trade marts? Why?

12. What percent of sales is your advertising budget?

13. How do you set your advertising budget?

Examples:

- As a percent of sales
- Competitive parity (i.e., match competitors)
- Objective-and-task method (i.e., setting objectives, specifying tasks needed to accomplish objectives, and estimating costs of these tasks)

14. How do you measure the effectiveness of your advertising?

15. What markets do you target in your advertising?

Examples:

- Corporate systems purchasers
- System integrators
- Neophyte computer purchasers
- Replacement/add-on buyers

16. What percent of the sales of your product is distributed through each of the following channels?

(Percent of Sales)

____% Regional distributors

____% Industrial distributors

____% National account distributors

____% OEM (including turnkey systems) and private label accounts

____% Manufacturer's representatives

Direct Dealer Channels

____% Office-front dealers

____% Computer specialty stores

____% Mass merchandisers

____% Office equipment dealers

____% Stereo & consumer electronics stores

____% Mail order

____% Other (describe) ____

17. Why the heavy reliance on ______________________?

18. What significant change do you expect in channels by 1987, especially with regard to turnkey systems vendors?

Thank you for participating! (Confirm name, title, address.)

APPENDIX G: INPUT PROPOSAL

PROPOSAL TO

OKI

CORPORATE IMAGE DEVELOPMENT, ADVERTISING, PROMOTION, AND DISTRIBUTION CHANNELS FOR OKI OFFICE AND TELECOMMUNICATIONS PRODUCTS

BY INPUT
SEPTEMBER 21, 1984
MOUNTAIN VIEW, CA

CORPORATE IMAGE DEVELOPMENT, ADVERTISING, PROMOTION, AND DISTRIBUTION CHANNELS FOR OKI OFFICE AND TELECOMMUNICATIONS PRODUCTS

OBJECTIVE

- The study will focus on the advertising, promotion, and marketing strategies necessary for the success of Oki office and telecommunications products in the United States.

- The principal source of data to achieve this goal will be a series of interviews with retailers, distributors, system integrators, product manufacturers, advertising companies, promoters, broadcasting companies, and exhibition organizers active in each of the product categories listed in "SCOPE AND METHODOLOGY" below.

- At no time during the study or after completion will Oki's name or intentions be revealed. The data will be the joint property of Oki and INPUT.

SCOPE AND METHODOLOGY

- The project will commence with a discussion between Oki and INPUT on the 21st of September, 1984 to confirm the precise content of the study and to determine the questions that need to be addressed.

- INPUT will then design several questionnaires aimed at the specific areas of knowledge of each of the different types of people that will be interviewed.

- The product types that will be addressed by the study include:

  - PBXs.
  - Modems.
  - Personal computers.
  - Printers.
  - Floppy disk drives.

- The majority of interviews will be carried out by telephone unless the target is in the Bay Area (when a face-to-face interview will be done). It is expected that each one will last at least 30 minutes. Each of the completed interviews and any supporting data will be made available to Oki on completion of the study.

- The number of interviews included in the study are:

  - A total of 25 interviews of retailers, distributors, and system integrators.

  - A total of 20 interviews of manufacturers of the different types of product listed above.

  - A total of 20 interviews of advertising companies, agencies (when appropriate), magazines, broadcasting companies, and exhibition organizers active in these product markets.

- On completion of the research, INPUT will analyze the data and prepare a report on the findings. This report will contain approximately 80-100 pages and will have the following format:

  I INTRODUCTION

  II EXECUTIVE SUMMARY

  - (conclusions dependent on results of study)

  III TRENDS IN DISTRIBUTION CHANNELS FOR OFFICE AND TELECOMMUNICATIONS PRODUCTS

  - By product type.
  - By distribution channel (including forecast of expected changes in the volume of product handled by each channel over the 1984-1989 period).
  - Emphasis on the role of system integrators, present and future.

  IV ANALYSIS OF THE PBX MARKET

  - Market growth and development.
  - Distribution channels.
  - Role of the system integrator.
  - Forecasted changes in distribution channels.
  - Promotional methods.
  - Sales methods of vendors interviewed.

  V ANALYSIS OF THE MODEMS MARKET

  - Market growth and development.
  - Distribution channels.
  - Role of the system integrator.
  - Forecasted changes in distribution channels.
  - Promotional methods.
  - Sales methods of vendors interviewed.

VI ANALYSIS OF THE PERSONAL COMPUTER MARKET

- Market growth and development.
- Distribution channels.
- Role of the system integrator.
- Forecasted changes in distribution channels.
- Promotional methods.
- Sales methods of vendors interviewed.

VII ANALYSIS OF THE PRINTER MARKET

- Market growth and development.
- Distribution channels.
- Role of the system integrator.
- Forecasted changes in distribution channels.
- Promotional methods.
- Sales methods of vendors interviewed.

VIII ANALYSIS OF THE FLOPPY DISK DRIVE MARKET

- Market growth and development.
- Distribution channels.
- Role of the system integrator.
- Forecasted changes in distribution channels.
- Promotional methods.
- Sales methods of vendors interviewed.

IX CORPORATE IMAGE DEVELOPMENT AND PROMOTION

- Overview.
- Recommended activities for corporate image development.
- Optimal distribution of promotional budget for maximum effectiveness.
- Recommended budget levels.

X OPTIMAL METHODS OF PRODUCT ADVERTISING AND PROMOTION

- By product type.
- By distribution channel.
- Methodologies for evaluating the effectiveness of advertising.

XI APPENDIXES

- List of trade shows.
- List of RBOCs by regional holding company.
- List of advertising agencies.
- Questionnaires.

- After submission of the report, Oki may consult with INPUT on the contents of the report for a period of 25 working days, free of charge. INPUT will be

prepared to work with Oki as needed thereafter on a normal fee-paying basis (i.e., $1,250 per man/day for senior consultants and $625 per man/day for consultants.)

FEE AND SCHEDULE

- The fee for this study will be $30,000 including expenses expected to be approximately $2,000. INPUT will absorb any cost over-runs that are incurred.

- One half of this fee ($15,000) is due and payable prior to the launch of the project and the second half is due and payable on receipt of the report.

- Providing authorization for the study is received on the 21st of September, 1984 the report can be delivered to Oki on the 30th, November 1984. The project will be under the supervision of Mr. Graham Kemp, Vice President of INPUT.

- The principal consultant working on the study will be Mr. Glenn Noreen, an employee of INPUT who lectures at the University of Santa Clara on Marketing and who holds an MBA from Harvard.

AUTHORIZATION

- To authorize this study, please sign below as appropriate. An invoice will be issued for the first half immediately, and on receipt of payment the study will be launched.

- Thank you for letting us be of service to you.

AUTHORIZED FOR OKI:	ACCEPTED FOR INPUT:
______________________	______________________
Name	Name
______________________	______________________
Title	Title
______________________	______________________
Date	Date